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THE MARYLAND FARMER:

DEVOTED TO
Agriculture, Horticulture, Rural Economy & Mechanic Arts.

Vol. 6.

BALTIMORE, JUNE, 1869.

No. 6.

ON DRAINAGE.

The strongest objection that has been urged against drainage is, that in our climate it is injurious in times of prolonged drought. We think that this is a mistake, founded upon the fact that our drains have been made so near the surface that all their beneficial effects have been rendered nugatory. Any injury arising from this cause is easily prevented by sinking the drain to a greater depth. No drain ought to be less than from three to four feet in depth, according to the depth which the frost penetrates the soil. In heavy clays, three feet or even a little less will be sufficient; in loamy, sandy or calcareous soils the results of draining will not be perceptible unless the soils themselves are thin and the subsoil is a retentive clay. In all cases where drainage is judiciously employed it will be found of the greatest advantage to sink the drains quite deep, and sufficiently large and open to carry off the superfluous moisture.

A careful farmer cultivates his corn or loosens the soil of his garden when either of them have become hard and baked for want of surface moisture. He thereby opens a thousand tiny mouths to the gases of the atmosphere and the unseen particles of vapor which, even in the driest seasons, are always present. The theory is the same in deep drainage, and the practice would be just as sensible and productive—often of equal benefit.

Not only is a deep, well-drained and mellow soil capable of absorbing more moisture, but is also able to retain it for a greater length of time than a more compact one. The former is porous and takes in water like a sponge, and becomes thoroughly saturated in all its parts. The latter is less readily penetrated, retains the water nearer the surface on account of the adhesiveness of its particles, and consequently parts with it more quickly upon the application of heat. In a mellow, deep soil the moisture will be below and beyond the searching rays of the sun and is evaporated slowly at the time when the plants most need it. In such soils, moreover, the surplus water of the heavy spring rains are carried off by the underlying drains. The earth is porous,

therefore is open to all the atmospheric influences, and becomes quickly warmed and a fit receptacle for the germination of the seed. No cold, by the presence of water held in the soil in solution in the spring, retards it, and the plant is not compelled to force its way through a hard crust to reach light and air. By the time the drought comes, the young plant has attained a thrifty growth and has struck its roots well down into the earth among the moisture stored away there, and is thereby better able to withstand a prolonged season of dry weather.

There is another objection sometimes urged against thorough drainage—that it carries off, in some measure, the soluble portions of any fertilizer that may be used. In Long Green valley, one of the richest portions of our State, the manure used on the land loses a portion of its fertilizing properties in consequence of the limestone rock underlying the valley. Through the fissures of this rock the water percolates and passes off, carrying with it a part of the manure, whilst the amount of lime in the soil has a tendency to burn up the land in dry seasons. The objection, therefore, to the loss of some of the soluble portions of the manure by drainage is well taken. Where the drainage is shallow the loss is appreciable, but in deep drainage any minute amount of loss is compensated for by the greater absorbent power of the soil.

A recent writer says: "Drainage water does carry off in solution appreciable qualities of the mineral solutions of soils that it would be desirable to retain. As might be expected, the amount of loss varies greatly in different circumstances. On sterile lands the loss of nitric acid, or ammonia, by drainage, is less than what is furnished in the rain and snow; whilst in highly manured lands the amount of loss will exceed what is obtained from the atmosphere. From land well tilled, and in a perfectly friable condition, the loss is greater than from land imperfectly tilled. Where a crop is growing upon the soil ready to appropriate whatever is presented in the water passing through it the loss is diminished. The conclusions arrived at on the subject are, that there need be no fear that underdraining will rob the soil of its fertility, because the rain,

which would run from the undrained lands and be lost, will either wholly or partially compensate for any loss that occurs through the drains—that there is no method except by drainage and deep culture by which stiff clay lands can be made to appropriate all the elements of fertility furnished by the atmosphere—that it is better not to manure excessively at long intervals, because a part of the manure will probably be washed through, and therefore it is better to apply the manure as it is required to meet the present demand.”

Even if it be granted that under-draining has some drawbacks, it has, nevertheless, many counterbalancing advantages. It tends to remove stagnant water from the surface and surplus water from under the surface, to lengthen the seasons by drying land earlier in the spring, by its porosity, and by its capacity to absorb the heat of the sun to continue dry and warm for a greater length of time. By deepening the soil the latter affords more nutriment to the growing plants, the undersoil is warmed and the soil generally better equalized as to temperature, whilst the soluble substances are more easily carried down to the roots of plants. Heaving out in winter is also thus prevented, and in many cases the injurious results of long drought are obviated. The quality of the crops is likewise improved, the influence of manure is more readily felt, and on some soils the rust is prevented in wheat, and the rot in potatoes.

The advantage of drainage can be easily determined by a very simple experiment. Take two ordinary flower pots, plug up the hole in the bottom of one of them, and then fill both with well-pulverized earth. Plant in them either growing plants or seed, and give these from time to time the amount of water necessary to their growth. The seedlings in the perforated pot, which represents a drained soil, will be found to mature earlier, and to be stronger and more robust than those growing in the other and undrained soil of the pot. The latter, if the plants live, will send up only sickly and weak shoots.

Twin Colts.

PORT TOBACCO, May 7, 1869.

To the Editors of the Maryland Farmer:

A mare, owned by a gentleman residing in this neighborhood, has recently given birth to twin colts prematurely. An instance of this kind having never before come under our observation, or never having heard or read of one, the question has been mooted among us, whether, under careful and proper treatment, the mare would have been able to bring the colts to maturity and successfully deliver and rear them. The incident here referred to is a novel one, and has naturally excited some interest. Can you or any of your correspondents enlighten us upon the subject?

Yours truly,

ENQUIRER.

COCKLE.

A correspondent writing from Roanoke County, Virginia, under date of May 6th, 1869, asks the following questions:

Will you be kind enough to answer in the next issue of your *Farmer* the following queries:

What is the origin of cockle?

What are the chemical properties of it?

What is the chemical effect of it in flour?

Is it considered injurious to health when ground with wheat and used as food?

And why is it that hogs and fowls do not eat it?

You will confer a favor by complying with the above request.

Respectfully,

A. M. JORDAN.

ANSWER.

1st. The origin of cockle is that of all weeds, and can no more be traced, except in a general way, than the origin of the nettle, the thistle, the mullein, or the daisy. Pest as it is, and troublesome as it may become to the farmer, it is one of those wild flowers more or less ornamental with which nature graces, or, as a farmer will insist, in the case of cockle, afflicts our fields.

2d. As to its chemical properties, these have never to our knowledge been analyzed, and therefore if it has any special properties of value the world is ignorant of them.

3d. The principal effect of cockle in wheat is to make the flour full of black specks from the breaking up of the husks of the seed, and also to injure its quality.

4th. We have never heard of its being actually injurious as a constituent of flour other than in the manner stated above. Of course the flour is deteriorated by its presence in it, but if an admixture of cockle with the flour rendered the latter seriously deleterious as food, we should have heard of it long since.

5th. The reason why hogs and fowls do not eat it must be left for the hogs and fowls to answer.—The presumption is that they do not eat it because they do not like it, and they are taught by instinct what to take and what to avoid.

We have thus answered our correspondent's questions *serialim*. We now respectfully urge upon him if he wants good wheat to go to work and rid himself of cockle. One or two hoed crops in succession, and certainly a summer and winter fallow with frequent turning of the soil will speedily check the spread of this pest. A much better way, however, is to pull up by the roots before flowering.—

[Eds. Farmer.]

WOOD ASHES contains all the inorganic ingredients which growing trees extract from the soil, and in consequence are justly regarded as the best fertilizer for apples, pears, peaches, plums, etc.

Our Agricultural Calendar.

Farm Work for June.

There are very few preliminary remarks to be made in regard to farming operations for the month. The work has all been cut out long ago and the strain and stress will depend upon the manner in which it has been pushed and the backwardness or otherwise of the growing crops. There are, nevertheless, always a multiplicity of details to be attended to, and to inexperienced farmers many suggestions to offer. The trouble of adequate labor has not yet been adjusted, and with us here in Maryland the wages of farm hands are high, especially during the pressure of harvest. Too many of the negro hands, quite as much to their own injury as to the detriment of the farmer, have crowded into the larger cities, where they live in squalor and oftentimes in the bitterest poverty, on such pittance as desultory labor offers. Liberty with them means a life of indolence, varied by odd jobs as hunger presses. The consequence is, that in the rural districts farm laborers, who were always scarce in busy seasons at the best of times, have become on such occasions very scarce and difficult to be had. One compensation has been found in the greater use of agricultural machinery, which is coming into much more general use than it ever was before, but the loss of field hands is still felt, and the uncertainty of negro labor constitutes one of the greatest drawbacks which the farmer has to encounter. In the course of time white immigration will fill up the void, but it is weary waiting for those who could profitably employ a large force of field hands and cannot get them, or at least such as can be depended on. The work for the month is as follows:

Harvesting.

Not until the early part of next month does the general wheat harvest commence in this latitude.—Farther South the harvesting by the close of the month will be well over, but the following suggestions in relation to matters connected with this important event may not perhaps be regarded as altogether untimely. First, then,

The Harvest Force.—Nothing better evinces the judgment of the farmer at the season of harvest than the provision of an adequate force of hands to push matters through as early as possible. He thus avoids the contingencies of rain, of shattering from over-ripeness, and of the labor of undoing wet sheaves and exposing them to the air to dry, thus causing not only a loss of grain, but also an injury to its quality. When the want of field hands is badly felt, machinery should be brought into play, and in such neighborhoods where the farms are

small and the farmers in moderate circumstances, it would be well if the necessary machines were bought and held in common, and a system of co-operation introduced, under such rules as might be found most advantageous to the attainment of the ends in view.

Harvest Implements.—In any event these should be of the best kind. A bad tool makes bad work; it makes also slow work; increases the labor of him who uses it, and retards the general operations of the farm.

Time of Cutting Grain.—The best period for cutting wheat is when the grain has passed from its milky state, and takes under the pressure of the thumb and finger the consistence of tough dough. Cut at this time the grain will be plumper and heavier, the flour whiter, and the tendency to shatter, which is so common to over-ripe wheat, as well as the liability of the heads to break off, will be obviated.

An Experiment.—Mr. Hannar, an English farmer, tested the question fairly. He divided a piece of grain into five parts and cut it at the following intervals with the following results:

No. 1, cut a month before fully ripe.	
2, " 3 weeks " "	
3, " 2 " " "	
4, " 2 days " "	
5, " when quite ripe.	

The yield of flour from 100 pounds of grain so cut was as follows:

	FLOUR.	MIDDINGS.	BRAN.
	Lbs.	Lbs.	Lbs.
No. 1.....	75	7	17
2.....	76	7	16
3.....	80	5	13
4.....	79	7	14
5.....	72	11	15

Here we see that grain cut two weeks before it was fully ripe gave an increase of $6\frac{1}{2}$ pounds of flour over the ripe wheat (No. 5,) and a gain of 15 per cent. on the flour of equal measure of grain.

Cultivation of Corn.

Keep the shovel plough and the cultivator constantly running through the corn rows until the corn is sufficiently advanced to lay by. The great secret of raising good crops of corn on soils in good condition is to keep the soil well and deeply stirred, so as to admit air and moisture to the roots, and to rigidly exclude all weeds.

Beets, Mangold Wurtzel and Carrots.

It is too late to expect heavy crops of these roots, but a fair supply in a good season may yet be obtained if they are drilled in at any time before the 10th of the month.

Late Potatoes.

If these are not already planted, go to work and get them in before the 10th of the month. With a

comparatively cool season, and occasional rains, a fair crop may yet be raised.

Broadcast Corn and Millet.

It is not yet too late to seed down to millet and broadcast corn. The ground should be well manured and put in the best possible condition. Of corn, seed broadcast, not less than three bushels to the acre, and of millet not less than one bushel.

Clover for Hay.

In harvesting clover cut when about half the blossoms are turning brown.

Buckwheat.

Get the ground ready for buckwheat by the middle of the month, but certainly no later than the first week in July. To make a good crop a small broadcasting of fine bone dust will be found very beneficial. Two things are desirable in growing buckwheat. First, to start the growth of the plant sufficiently only to catch the rains which become more frequent after July, and to push it forward sufficiently to enable it to ripen before frost. The best soil for buckwheat is a good sandy loam.

Quantity of Seed to the Acre.—Sow from two to three pecks to the acre.

Time of Harvesting.—Commence cutting Buckwheat when one half of the grains have turned black.

Ruta Baga Turnips.

There is no hardier vegetable, or one that is more nutritious for stock than the Ruta Baga Turnip.—It will not produce as heavy crops as the Mangold Wurtzel or the Sugar Beet, but it will keep better than either, and for early spring feeding of stock is decidedly superior to any other root, except the carrot.

Time of Sowing.—The best time of sowing is from the middle of June to the first week in July.

Mode of Culture.—Either broadcast or drilled in. The latter mode is decidedly to be preferred.

Soil.—The soil best adapted to the ruta бага is a rich loam, inclining rather to sand than to clay.—It should be ploughed deeply and well harrowed for finer the seed bed the better will be the crop. If manure is to be use is should be well rotted and should be distributed broadcast, and ploughed under, especially if the seeding of the turnip is also to be broadcast. If on the other hand the drill is to be used, the manure should be applied directly to the drills, as in the case of potatoes—the drills being flattened after ridging up by running a roller over them or breaking them down with a back of a rake—along the centre of these flattened drills distribute the seed.

After Culture.—Dust the plants on dewy mornings until they come with rough leaf, with lime or wood ashes, or soot to keep off the fly. When well up thin out to eight inches apart, and if in drills

run the cultivator lightly between the rows. If broadcast use the hoe. Keep down all weeds and at the end of a week give a second working, continuing the process, three times more at intervals of ten days.

Salt Brine, a Preventive Against Smut.

Among the many experiments made to guard against smut in wheat, perhaps none has been more successful than that of saturating the seed in brine. Its use is very old, and the discovery of it wholly accidental. In 1670 a ship laden with wheat was wrecked near Bristol, England. After being soaked some time, the cargo was rescued and sold to farmers, and most of it sown. The following harvest the wheat crop in England was generally damaged by smut except that obtained from the wheat which had been soaked in the salt water. This marked difference was sufficient to justify the experiment again, and its success has kept it in practice ever since.

The following came under our own observation: Two farmers procured a fine sample of wheat for seed and divided it equally between them. The one soaked his wheat in brine, the other having no faith in it neglected to do so. The former had not a smutty ear in his whole crop, while the yield of the latter was almost worthless on account of it. Other causes may have existed to produce this difference, but none that were apparent, and from the remarkable difference in the two results we are led to believe that it was effected by the means employed in the one case. It has been fully ascertained that this preventive will not avail when the seed is affected with smut, unless the season is very favorable, which alone will prevent smut.

When crops have been damaged by smut, an excellent expedient is to select seed from a different soil, having it well cleansed. Experience tells us that selecting seed wheat from different localities is beneficial in many respects. It is best to bring it from a strong clay soil, no matter on what kind of soil it is to be sown. A change from red clay to a white clay works well, so also from a white to a red clay. Changing seed from sandy soil to clay has not been successful, and it is an old saying that this is no change at all.—*Dietz's Farm Journal.*

SMUT IN WHEAT.—An esteemed correspondent in St. Mary's county, Md., sends us the following as a successful preventive for this terror of the wheat crop:

"I see in the last *Farmer* a communication for the prevention of Smut in wheat. I have used a solution of blue stone and sulphate of copper, with great success. It is simple, cheap, and easily applied, and does not interfere with drilling. H. C."

Garden Work for June.

The principal work in the garden for June is to keep up a thorough cultivation of the plants in the ground. Of course there are fresh supplies of different vegetables to be planted or seeded; but after all the main business is thorough and sturdy tillage.—Nothing suffers more than a garden from neglect; whilst nothing better repays, liberal manuring and careful and incessant attention. The work to be done is as follows.

Setting out Cabbage Plants.—Where there is a choice of seasons cabbage plants should be set out in moist weather. But if the weather is dry it is better to transplant toward evening, water thoroughly and shade for a day or two, the young plants as much as possible. In taking the plants from the seed bed where there are but a few required to be set out, it is best to take up the plants with a scoop trowel and remove them, earth and all, in the place in the garden where they are to stand. In this way there need be no check at all to their growth. If, however, a large number of plants are to be set out, they should be lifted carefully so as to retain as many as possible of the fine fibrous roots. Have any sort of rude vessel ready and in it a mixture of soot, fine earth and cow manure, reduced by water to the consistence of cream. Put the roots of the plants in the mixture, deep enough to cover them, and keep them there until they are taken out for planting.

Peas.—Continue to sow a row or two of peas in a shady part of the garden every two weeks in succession.

Melons and Canteleupes.—Keep these clear of weeds—stir the soil well and water of an evening in dry weather.

Transplanting Cauliflower and Broccoli.—The same precautions which are required for the successful transplanting of cabbage are also required to transplant cauliflower and broccoli—a close adherence to the method given above, is all that is necessary.

Sowing Cauliflower and Broccoli Seeds.—Sow seeds of these in warm open borders at any time during this month for a full supply.

Beans.—Plant bunch beans at intervals of two weeks for succession. Choose a shady border, and water frequently after sunset.

Lettuce.—Transplant lettuce for heading.

Small Salading.—Every week sow a bed of small salading to keep up a constant supply.

Radishes.—Thin out you radishes to three inches apart and sow fresh seed of the summer kind, at intervals of ten days.

Spinach.—Drill in every ten days a few rows of spinach, and see that the ground is deeply spaded and made very rich—water occasionally.

Carrots and Parsnips.—These should have been seeded several weeks ago. If however, seeding has been delayed they may be drilled in at any time previous to the tenth of the month. Avoid long manure for these roots.

Sowing Cabbage Seed.—Prepare a bed for the reception of cabbage seed. Chiefly Flat Dutch and Savoy, to be transplanted hereafter, for winter use.

Cymbins and Cucumbers.—Hoe these well and keep them free of weeds.

Lima and Carolina Beans.—See that these are well poled, kept clean, and that fresh supplies of earth are occasionally drawn about their roots.—They will need water in time of drought.

Beets, Parsnips and Carrots.—All these roots now require attention. Keep the earth loose about them, weed them thoroughly, and in dry weather do not spare water, but never apply it until towards sunset.

Early Turnips.—Sow a bed of turnips for early use. The purple-top variety is the best.

Salsify or Vegetable Oyster.—Keep this excellent root free of weeds, and stir the soil about it freely and often. Do not let its growth be checked for want of water.

Onions.—Work these occasionally, keeping the soil loose about the bulbs, but not covering them.

Okra or Gumbo.—Thin out the plants where they stand too closely, to eight inches apart and earth up. Okra requires, to bring it to perfection, a deep, rich, moist soil.

Tomatoes and Egg Plants.—Transplant these, if not done before, during the early part of the month.

Red Peppers.—Set these out from the seed bed.—Work the young plants occasionally, and give them a good supply of water in dry weather.

Endives.—Set out such plants as may already have been grown in the seed bed, and sow additional seed for a late crop.

Late Roasting Ears.—Plant a few rows of corn for late roasting ears.

Pot and Medicinal Herbs.—Pick out from the seed bed such plants as are large enough to remove, in moist and cloudy weather, and shade them for a few days until they have taken root.

Peach Trees.—Examine the roots of the Peach trees a few inches below the surface of the ground. If gum exudes the grub is certainly at work under the bark. Take a pen knife and cut it out by following its course, or follow it up with a piece of wire or a coarse knitting needle, and do not desist until it is found and destroyed. Strew wood ashes around the roots and cover all up again.

COOKED meal is nearly double the bulk of uncooked, yet quart for quart it goes as far. The difference is, that much of the food is undigested unless cooked.

NOTES AND COMMENTARIES.

BY PATUXENT PLANTER.

The Proper Value of Homesteads in Maryland.

How few buyers of land take into consideration the value of other things besides the actual value of the soil. Strange as it may appear, if two farms of equal fertility and natural advantages—one with no improvements except good fences and a rough barn or two, and the other with fences, barns, every necessary out-building, and a comfortable dwelling, highly improved grounds, fine orchards, &c., &c., be put in the market, the chances are the latter will bring not more than \$5 per acre more than the former. The cost of building, the labor and time required to build, the long time required for fruit trees to reach bearing maturity, all is lost sight of, and the purchaser, to save a few dollars in the first outlay, will have to spend twice as much as his farm cost him to have things put in order, to give him comfort, or even to live decently. In the present time the cost of building is enormous. A farm well fenced, with every required out-building, a good house and a fine orchard, with ornamental grounds and the appurtenances of a first-class farm, is intrinsically worth three times that it would be if it had none of these improvements. The purchaser is then ready to begin the work of life. A man had better give \$20,000 for a farm of 100 acres so improved and ready for enjoyment and return of interest on the amount invested than pay the same for 1,000 acres of unimproved, though fertile, soil. There are many such highly improved farms in Southern Maryland, convenient to schools, churches, mills, work-shops, railroads or water navigation, yielding heavy crops, surrounded by the most agreeable and intelligent society; the luxuries of the bay and rivers at easy command; with a climate healthy, scenery beautiful, and soil easy to cultivate and susceptible of the highest culture, now in the market at prices ruinous to the seller, ranging from \$25 to \$80 per acre. The size of these farms is from one to five hundred acres, and most of them would be subdivided to suit purchasers. And yet we find these neglected by purchasers or capitalists, preferring to buy the wild lands of the far West at \$5 to \$40 per acre, without a house, fence or hardly a tree; away from society, from the great marts of commerce and the centre of refined civilization, the seat of the national government. They lose sight of the great value these lands will be in the future when the District of Columbia will be one vast city ten miles square, and Baltimore has become the *London* of the South. The rapidly increasing population and wealth of these cities indicate these results beyond the shadow of a doubt. I am neither warped

in my judgment by prejudice or interest when I say there is no safer or better field for the land speculator than is now presented by Southern Maryland, as the Baltimore and Potomac Railroad is approaching its successful completion. There is no section in the Union of the same breadth of territory, which offers so many inducements to the capitalists; the lover of rural life with ease of access to town, or to the man of means who wishes to indulge in a luxurious quiet, with every enjoyment of a balmy, healthful climate, of a soil teeming with fruits and vegetable products and of water alive with the rarest delicacies of fish and fowl. Our fish, oysters, crabs and terrapins, with the Ortolan, Blue-wing and Canvas-back constitute a paradise for the Epicurean.

I have written this much in part answer to the enquiries of "A Pennsylvanian," in the February number of the *Maryland Farmer*, but the excellent "answer" of D. L. of Howard county has covered the whole ground and supercedes the necessity, indeed the propriety, of my entering further into particulars. Such enquiries and answers lead to much good and meets most aptly the sensible views and wishes of your correspondent "Badger," in the April number, as to "an interchange of ideas and a better knowledge of each other, and our country at large." This interchange of sentiment and thoughts upon all subjects of interest to the farmer is the very life of agricultural success, and national prosperity; far better for individual and national benefit than windy congressional diatribes on party politics, or the disquisitions of place-hunters on the measure of a gold or whiskey "ring."

Sweet Potatoes.

The plain, practical treatise on the culture of the Sweet Potato, written for your April number, was just what our people wanted. It was most welcome, as it came in the nick of time. There is much greater attention paid to the growth of this vegetable in this region than formerly. We have found that we can grow a fine article at not much cost.—Our light soils are adapted to it; and the product is double that of the same land in Irish potatoes, consequently it is twice or three times as profitable as a crop. There are a hundred bushels grown now where not five were grown *ante bellum*. Until I read the article of "A. C. C. A Jerseyman," I was not aware how many varieties there were—I see he names one sort "Nancy Mun," is it what I have seen advertised in Northern Journals as "Nan-iamond?"—the description is alike? Why the distinction? One seems to be named after a woman, the other after a place. By the way, should I not write "for" instead of "after"? Which is right? Here is a batch of questions for you, so please answer.

Farm Stock.

When stock of all kinds can be reared in this country so cheaply, it is remarkable that more attention is not given to this department of farming. Horses and mules were never higher—beef is high; pork and bacon enormously high in proportion to price of corn. Sheep and hogs ought never to be high, both being so easily raised and at such little cost in most parts of the country. As long as farmers will sell their early calves and lambs, because tempted by high prices, both sheep and cattle will deteriorate and decrease in numbers and value.—Farmers should wake up to the importance, as a great source of profit, of rearing more stock for their own use and for sale. It is bad management for a farmer not to raise his own horses, cattle, hogs and sheep, so as to sell enough beef, butter, mutton, wool and pork to meet the current expenses of the farm in the way of seeds, clothing, groceries, taxes and blacksmiths and other small incidental expenses.

The Farmer vs. The Professions.

I take some credit to myself, believing that an humble effusion of mine, has called from the flowing pen of "D.L." the graceful essays he has lately addressed to the "young men of the country" on the superior advantages of a farmer's profession over what are termed "the learned professions."—His reasoning is as cogent as his words are pleasant to the ear. The subject is a very important one and well deserves the attention and reflection of our young friends. If they could be made to feel that the pursuit was a professional science and not mere mechanical drudgery how much more happiness, real comfort and honorable content there would be among that class of our fellow citizens who generally prefer to starve in a garret as literary men, or dissipate the golden days of youth in luxurious disquiet and elegant misery as gentlemen of leisure, than be the strong bouyant tiller of the soil, searching the great principles of natural science for the benefit of their fellow man, daily increasing their stores of health and honest wealth, learning the deep mysteries of nature and forming a better conception of the wonderful laws of nature as pre-ordered by nature's God, and thus enjoying mentally and physically their early manhood in all its robust vitality to the highest degree of rational and intellectual pleasure, feeling day by day more forcibly the truth of the aphorism,

God made the country, Man made the town.

THE SWEET POTATO.—The New Orleans *Picayune* says the sweet potato impoverishes the soil far less than grain crops, and is produced in far greater abundance. It yields from 15,000 to 20,000 pounds to the acre, while corn yields only from 1,000 to 1,200 pounds,

FOR THE MARYLAND FARMER.

PARTIAL SOILING AND ROOT CULTURE.

I desire to offer, through your columns, to those who have, and intend to keep a *Dairy* the current year, some recommendations. What I shall recommend is no untried speculative theory, but is the result of years of experience in farm practice, under a variety of circumstances, and will be found practical and profitable.

That a milch cow shall be profitable to her owner, she must never be stinted for food of a proper character at any season of the year.

If she is badly wintered, a large portion of the summer will be lost in her resuscitation, before she is capable of producing a full flow of milk, and the effect will be, that no amount of food, late in the summer can restore, or produce the yield of milk that would have been given in the early part of the summer, which is always the most profitable dairy season. It is an old proverb and a true one, that "an animal well wintered is half summered."—There is no domestic animal to which it applies with more force than to the cow.

Although it is often remarked by old school farmers, when they see a cow in high flesh in winter, "she is too fat," I have yet to see it result thus, although I will admit that a cow might be over-fed when not in profit, and acquire an excess of blood and flesh that would predispose her to milk fever, caked udder before calving, and perhaps other difficulties, if neglected and treated the same as one in low condition, but with proper care and management there is no danger of any evil consequences from a high condition at the period of parturition.

On the contrary I have found that those in full flesh and strength endure the severe ordeal of delivering of their young much better than those in low condition, and that they invariably have a full supply of milk at once, generally more than the calf can take until it is four to five weeks old; and that she is worth about double for the season what the same animal would be if poor and weak at calving time.

It is a common practice with many cow owners, to attempt to make up for previous neglect and want of food and attention, to feed liberally with highly nutritious food soon after calving, but the practice is dangerous and often results in greater injury to the cow, than the course generally pursued of letting her take her chance with the herd. An excess of nutrition immediately after calving tends to produce fever in the system, and instead of increasing the secretion of milk, checks it, and so deranges the system that she is comparatively worthless the balance of the season; if it does not prove fatal, as it not unfrequently does. In case a cow is a deep

milker and the udder fills and inclines to fill and cake, or gather several days before other indications are developed that always precede the parturient state, all succulent food should be withheld, and the amount of dry food given may be slightly diminished. Extraordinary milkers sometimes require milking out before the calf is delivered, even with the precaution in feeding recommended, and none but good milkers ever require it.

When the cow has fully recovered from the effects of calving, she should be liberally, but judiciously fed with succulent food that the secretion of milk may be strongly promoted at once, as it is found by experience that if they are allowed to fall off in the flow of milk, and continue so for several weeks, no amount of proper food will restore them to that degree of productiveness that might have been maintained had they received a proper quantity and quality of food from the first. In the absence of grass or other green food, roots are the best substitute.

Mixed with the bran, meal or oil cake fed should be fed mixed with cut hay, that it may be raised and ruminated with the hay, which cannot be effected if they are fed in the form of slop.

If the cut hay and ground feed is scalded, or steamed, it will yield fully 30 per cent. more profit, and about 10 per cent. more when fed warm, if the weather is cold. A cow should not be allowed to drink her fill of cold water for ten days after calving. I am aware that the numerous class who are always murmuring about their "*bad luck*" will say that this is too much trouble, while in fact it is very little, as a bucket of hot water will temper a quantity sufficient for half a dozen cows. Many valuable cows have been lost for want of attention to warming the drink at the critical period, and too large a quantity of raw, cold roots will have the same ill effect. The farmers' dairy should be so managed that a large majority of the cows will be rid of their calves at the period that a full supply of grass, or other green food may be had, and the season of green food may be greatly lengthened and protracted to late in autumn by making proper provision for soiling. Green rye is the earliest food with which we can soil, and large red clover or lucerne the next, followed by orchard grass and green oats, and these by fodder corn. All these crops for soiling should be grown on land lying contiguous to the stable, and it can hardly be too highly fertilized. If the land is so fertile that portions of the crops fall in the early stages of growth, that portion may be cut first and there will be no loss. All these soiling crops may be succeeded by another crop the same season, in this latitude. Rye for the coming year will be the proper crop to succeed the latest corn. Ruta бага and flat Dutch

turnips may be made after the earlier soiling crops, and if the land is fertile with stable manure, and ammoniated and phosphatic fertilizers are applied in the drills, a full crop of these roots is as certain as any other crop.

Although I have known a dairy of 180 cows kept up throughout the year, and kept by soiling, and on hay, roots, grain and slops, without being even turned out to exercise, and have seen them yield a large profit, and keep in a thriving, healthful condition, in fact, were all prepared for the shambles under this treatment, I would not recommend it, especially for farmers.

The partial soiling system is beyond doubt the most safe and profitable one.

The main dependence may be on the soiling food, but a dry, shady pasture, convenient to the stable, with an abundant supply of pure water is very important, especially if the cows are to be retained for dairy purposes. A pasture of orchard grass will be found the most profitable generally, as it bears tramping better than any other grass, suffers little from drought when closely gnawed, and will continue to develop a fresh vigorous growth throughout the season.

The root crops that I have found most profitable for feeding milch cows are sugar beets, mangel wurzel, parsnips, ruta бага and the purple turnip. The labor necessary in carrot culture makes them too expensive, and they will not produce as great a flow of milk nor as good a quality of it as the parsnip or sugar beet. But on land adapted to the carrot, it well remunerates for the cost of production, to raise sufficient to feed horses a half peck per day throughout the winter. I have found a peck of oats and a half peck of carrots better for horses than twelve quarts of oats. These root crops should all be produced in drills except the common turnip, and I have found it most profitable to grow them also in drills. The drills should not be less than two feet six inches apart for any of these roots.

The foliage of the mangel, beet and ruta бага may be partially removed, and fed in the latter part of the season without injury to the crop, and it is economical to do so, otherwise there will be an excess of the tops, more than can be profitably fed at the harvesting season, as they will nearly all require to be harvested about the same time. They should all be left in the ground as late as will be safe on account of frost, as they keep better in the ground in the mild weather of autumn than in pits, or in cellars.

The common turnip should be consumed first, as they do not keep as well as the other varieties. The crop of all kinds of root should mainly be buried in pits, and should have no straw or fodder put on them before applying the earth, as they keep better in contact with the earth.

I have found that all roots preserve better in narrow pits than in wide ones.

When the pits are too wide, and too large a bulk of the roots is together they heat and grow more than in narrow pits.

A pit 3 feet 6 inches at the bottom and as high as the roots can be conveniently piled by hand placing them, will be found a good width. A depth of five or six inches of earth is all that should be put over the pits in this latitude, or for the South, and when this earth covering becomes frozen nearly to the roots, a good covering of stable manure should be applied. The heat of the roots in the pits, and that from the manure, will generally extract the frost by the time the roots from the pits are required for feeding.

No excavation should be made for the pits, but they should be placed on the surface, and by taking the earth from each side for covering, the trench will be lower than the bottom of the pit, and if a drain is made to conduct the water from the trench the pit will be dry, an essential condition to be maintained.

The parsnip will keep better in the ground than in the pit, as they are not injured by frost, and may be harvested for use in the spring when all others are gone. I have found great economy in topping mangels, ruta bagas, and beets in the ground before harvesting them. The topping may be done several days before the roots are harvested, if there is no frost, as this will enable us to consume all the tops, which is not practicable, unless the number of animals is large and the root crop limited, before some of the tops will spoil. One hand will top more roots while they are still in the drill, than three will with knives after they are pulled. For topping in the ground I use a light steel hoe with which, after a little practice, a man will top them well with great rapidity.

When thus topped, I use a sub-soil plow with which to raise them, by running the plow under the row they may be raised as fast a team can walk, or as fast as a dozen active men can pick them up and shake off the earth. It is not desirable to remove all the earth, as they keep better with some adhering than when clear.

There is no objection to feeding them to horses with quite a quantity of earth attached, but for cows it is important that they should be clean, particularly if the soil adhering contains gravel or coarse sand, as these pebbles get into the folds of the stomach producing irritation and inflammation. I have dissected two cows which died from eating earth of the character described with the roots, and found pebbles, and several pieces of nails in the stomach, and it much inflamed and swollen. The nails were supposed to have gotten among cut corn stalks which were cut on a barn floor, by horse power, and the machine kept in place by nailing cleats to the floor, in removing which, the nails were broken off and mixed with the stalks.

J. WILKINSON, Baltimore, Md.

Why Sorgo has Proved Almost a Failure in Maryland.

To the Editors of the Maryland Farmer:

It is not caused by either soil or climate, but it is the fault of the grower and manufacturer. First, it is the last thing to be planted in the spring, and then very often in ground that is too poor to raise anything else, and planted with seed that is not good. Second, it is very seldom worked until the grass and weeds almost smother it out. Third, the cane is very badly harvested; it is broken and bruised to such an extent that the juice spoils before it is manufactured, hence the syrup is of inferior quality. Fourth, the cane is very frequently hauled through the rain, when it gets wet and moulds.—These are the faults of the grower. The fault in manufacturing is, First, it is too often ground instead of being pressed; when ground you get the juice out of the hull, which gives the syrup a dark color and a bad flavor. Second, it is cooked with so slow a fire that the skim will not raise to the top, and the syrup will have a green color and taste.—If growers would take the same pains they do with corn it would pay well.

The way to secure a good crop of syrup is, First, to take a piece of sod in the fall or winter and plow deep, harrow well, and plant with pure dry seed as soon as the ground gets warm in the spring; roll the ground, the cane will come up better and you can work it much sooner; keep it well worked until the cane is two feet high. Second, harvest the cane when the seed is in a dough state; take off two joints of the top, blade it down, but do not break or bruise the stalks; then tie it up in small bundles and put about a two-horse load in a place and cover it over with the tops and blades, to keep it from getting wet; and do not haul it to the mill until you can get it made, for it is better made up as soon as it is hauled. Then, if it is properly manufactured, you may be sure of a good yield of syrup of a fine quality. I have been manufacturing for seven years, and have made 18,500 gallons of syrup, and I find that those who follow the above rules have the most and best syrup.

A SUBSCRIBER.

HARFORD COUNTY, Md., May 20th, 1869.

THE "PERSICATOR."—This is the name of a new fertilizer just introduced into market by the enterprising firm of Wm. Crichton & Son, of Baltimore. We have received from the agents a pamphlet setting forth its merits. It is titled "*The Persicator, or Soluble Phosphate of Potash—The Peach Manure.*" The formula is furnished by an eminent agricultural chemist, one well known throughout the country. Those interested can send for a copy of the pamphlet as above.

FOR THE MARYLAND FARMER.

A VOICE FROM GEORGIA.

I notice an article in the April number of the *Maryland Farmer*, headed "Voice from Wisconsin," and signed "Badger," who comments upon a "Voice from South Carolina," in your March number. I read both articles with much interest, and shall also add a few comments of my own: What "A voice from South Carolina" says is strictly true, and represents the condition of every Southern State, so far as his picture is drawn of the existing state of things. But so far as our Wisconsin friend recommends our "taking a philosophic view of the matter, by making carpet-baggers and government spies, in the shape of picture venders and sewing machine humbugs, can be made useful and profitable to the Southern people if they only realize fully the position," &c., &c. We cannot agree with such views and ideas of our "Wisconsin" friend. Perhaps he has never witnessed their policy and operations in the South, and to draw comparisons and make up conclusions between a sewing machine agent traveling through Wisconsin and these carpet-baggers and agents that have invaded the South since the war, the least to say about it, is, it is but a poor compliment paid to the sewing machine agent in Wisconsin to mention his name and calling in connection with these vile emissaries that have overrun the South with motives purely fiendish.

Again, Badger cites a case where a Northern man invested \$30,000 South, and "the pressure" he could not stand, so he sunk \$8,000 and left. It is said that "a man is the architect of his own fortune," perhaps in this instance this man made himself disagreeably obnoxious to his fallen foes, hence he was not as much respected as he might have desired. I know the feelings and sentiments of our people—they desire peace and friendly relations with the North; they desire to see a respectable class of Northern farmers come among us and settle and farm, such men will be received with courtesy and treated with the respect that their deportment entitles them to—a gentleman will always be treated with courtesy and respect, even among strangers, as such. Northern men need not fear any "pressure" if they conduct themselves as gentlemen. It should be borne in mind by our Northern fellow citizens that the situation of the Southern people is a very peculiar one. Since the surrender we have been shown no confidence whatever by the North; we have been treated as outlaws; placed under military governments, domineered over by Bureau agents, misrepresented by mercenary writers for the press; in short, all has been done to estrange a national alliance but little towards reconciliation.

As such, it is but natural for the Southerners to be reserved and cautious, in some instances distant, towards a people who have treated us as we have been treated since we laid down our arms with the determination to live in peace and amity under the government of the United States, and such is still our desire, and what we earnestly request to do but no confidence is had in our assertions; we are goaded on to desperation nearly by a set of unprincipled carpet-baggers, and under such circumstances some Northerners seem astonished if our people are cautious and reserved in their deportment towards them. If conquered, we still cherish self-respect.

Ever since the war I have used my pen in the agricultural journals, as well as the newspapers, inviting the attention of the Northern agriculturists to come and visit the South, and form acquaintance with our people, and examine the country, feeling well assured if they would come and settle among us it would result in mutual advantages. Some have come, others have written to me, making minute enquiries as to our lands, &c., and I have not seen the first one that complained of any "pressure," what they seemed mostly to fear was the number of negroes so suddenly turned loose upon the country as freemen, without the proper qualifications to appreciate their situations.

And I again repeat what I have heretofore said, let a respectable class of Northern farmers come among us and settle, and they will have nothing to fear from the treatment they will receive from Southern gentlemen. We have as fine a farming country as the world affords, a salubrious climate, facilities of Railroads and rivers—a soil that will produce most any crop, lands cheap, and church and educational facilities. No country under the sun offer so many inducements for farmers and manufacturers to come to and settle, as the Southern States—and the day is not far distant when it will be found to be the case,—and in conclusion I must add a few words in particular for my Wisconsin friend. If you doubt what I have said, come and visit the Cherokee country of Northern Georgia, and if you do not agree to what I have written—I will then say, you are surrounded by some "pressure" inexplicable. Let me also add, I am not interested in the sale of any lands; have none for sale. I am a farmer, owning a farm, from which I earn my living, but should you come to Cherokee, Ga., I will show you as fine and as beautiful a farming country as any one could desire. CHEROKEE.

WHENEVER we find a country divided up into small estates, each and every owner working his lands with his own hands, we find a brave, patriotic and free people, enjoying competence and domestic comfort with manly dignity.—*Patrick*,

FOR THE MARYLAND FARMER.

ONE WASTE FROM THE FARM.

How many denizens of the city or village, or as to that, even our rural and agricultural population, ever devote a thought to the source from which all that goes to nourish or clothe the body is derived, and at what expense of elements it is produced, and from whence those elements are derived?

Take the wheat from which our bread is made, the other grains, vegetables, &c., which goes to support life, and see from their analysis what an amount of matter enters into their composition.—All the mineral, or indestructable, matter of which they are composed is withdrawn from the soil, and what becomes of it? Is it returned to the source from whence it came? Does it not rather, with other wastes, expend much of its ammonia in the 'desert air,' and a greater portion run to the sea, and there lost to all intents and purposes so far as original sources are concerned?

Can this waste be prevented and utilized? In a large measure, without doubt, it can be practically and economically done with very little inconvenience to the residents, provided they can overcome a little natural repugnance, and at the same time take the trouble that neatness and health require in all densely populated districts, and would be found conducive to the health of all rural dwellers.

All observing persons will have noticed the power that dry muck, earth or soil has in absorbing and deodorizing all offensive effluvia and odors arising from decomposing matter; taking advantage of this principle it would be easy for every one not only to save this waste of excrement from our privies, water-closets, vaults, &c., but also produce a sufficient revenue from their sale, to pay the trouble, &c., and save a much larger sum in doctors' bills.

If the dwellers in cities or elsewhere object to the trouble of throwing into the receptable of the privy a small quantity of dried and sifted earth after each deposit, there are other means of accomplishing the same end with perhaps less trouble, but an enhanced expense. In our large cities water-closets are extensively used—which is unnecessary for me to describe, the operation, &c. of—these are a source of waste aside from the fertilizing matter which they carry off, and at the best only but partially answer the end desired, and still are a continued source of expense to keep in repair, &c.

Reflection and investigation on like matters led an English clergyman to the invention of the Earth-closet. The principle on which it is based is the power, in the dry inorganic matter in the soil, to absorb and retain all offensive odors and fertilizing matters. It consists of a simple mechanical contrivance, quite similar in external appearance to the "pull up" or "trap" in city water-closets. It is so

contrived, internally, as to measure out and discharge into the reservoir underneath a sufficiency of dried and sifted earth or clay to cover and absorb each discharge.

These closets are now being made and introduced in this country, and if they could be generally adopted no doubt but that they would be as highly prized as they are in England, where they have been introduced.

The objects accomplished, in their general use, would be the entire abatement of the most disgusting nuisance of privy vaults, and substituting therefor a neat inodorous closet, or chair, which can be used in any part of the house without offence, or danger to the health of the occupants; and the preservation in an inoffensive form of a fertilizer of more value than all the commercial manures and fertilizers sold and used in this, our country.

According to all English testimony, wherever they have been used there, the first cost of their construction is less than one-half that of vaults or water-closets. Then the expense of supplying them with earth is very trifling, for the same earth may be dried and re-used several times as effectually as at first while the removing of the deposits is no more offensive than the removal of so much ashes.

The absorbing of dry, sifted earth is so great that no odor is perceptible even when the "commode" remains, with its contents, in a close chamber for any length of time. The only trouble here is to empty the draw or vessel, used as a receiver occasionally, and see that a supply of dry sifted earth is constantly in place.

This principle is of easy application—without the liability to any royalty for patent, &c.—in all rural places; for nothing more is necessary than to have a tight, perfectly dry vessel or vault to our present privies, with a barrel of dry sifted earth and a scoop at hand with which to cover and absorb the odors of each deposit instantly.

GIARDINIERE.

THE FRUIT CROP.—The St. Mary's (Md.) *Beacon*, in their last issue state that they have received from the largest peach-grower in that county—Col. Edmund J. Plowden, of Milestown—the following solution of the peach question. The Colonel says:

The three and four-years old "Hale's Early," matured with us fully two weeks sooner than any other variety (of which I have more than 5,000,) where planted on light south hill sides, and additionally protected by locust groves, show little injury; but on high clay lands, without protection, are mostly blighted. This variety is not the size of a peanut, and from them I expect more than half a crop. All varieties of grafted peach, over five years old, particularly where exposed, have drooped most of their fruit, the injury being the greatest with the late peaches, particularly the "Late Heath," and all the yellow varieties."

FOR THE MARYLAND FARMER.

**Keeping Sweet Potatoes the Whole Year Round:
Method of Packing and Treatment.**

In the early part of summer, gather leaves from the woods, old leaves that have laid upon the ground during the winter, and spread them in the sun to dry, and after they are dried place them in a dry room for keeping until the time arrives for packing the potatoes.

Have barrels ready to pack them into. Cover the bottom of barrel with leaves one inch deep, then lay in the potatoes carefully on top of the leaves, packing them closely together, then put in more leaves on top of them—enough to cover them, and lay in more potatoes, cover with leaves, and continue with layers of potatoes, and cover with leaves until the barrel is filled. After they are packed the barrels may be placed in rotation of tiers about the room in which they are to be kept. The barrels may be set on top of each (or over each other) by laying pieces across the top of the barrels *six inches high*, and laying boards on top of pieces to set the barrels on. The *space between* the barrels will make it convenient for taking out the potatoes as needed, and will give *ventilation* to each barrel as the potatoes must be uncovered at the top of the barrel for the heated air to escape. They must not be closed at the top of the barrel, or they will rot.

Immediately have a fire made in the room where the potatoes are to be kept, and the stove should set in the middle of the floor of the room, or near it as possible. I know of many sweet potato growers who keep them from October up to the middle of April, in a chamber over the kitchen, by heating the room with a connecting-pipe from the stove of the kitchen into a drum of the chamber, which is a good way when a chamber can be had for such a purpose, and can be made sufficiently warm with a pipe connected from the stove of the kitchen. The room should not be exposed to too much light—have it darkened with curtains at the windows, but it would be preferable not to keep them in a room that has windows on the *north* and *west* sides of the room.

The temperature of warmth in the room should be from seventy-five to eighty degrees for *at least* ten days after being packed, so as to keep them warm *to dry in the usual sweating process*; for, should the room be cool, (though not feel chilly,) they will become damp and wet; and being kept in this chilled, cold, wet state, they will not keep, hence must be kept in a warm room that can be heated with a fire from a stove. During the time of sweating the room must have air—have a window raised in the daytime; the curtain at the window should be rolled up, as it is not so important to keep

the room darkened during the time of the usual sweating process, but after they are out of danger by sweating it is best then to keep the room dark, with not too much light. After ten days expires, (the time allowed for the usual sweating process, and in the temperature I have mentioned,) it becomes important to keep them at uniform temperature, as they are very sensitive to frost. From fifty-five to sixty degrees is about the proper temperature, and they will not bear a lower temperature than forty degrees without injury.

The time for keeping sweet potatoes in a warm room generally expires about the middle of April, but they can be kept and be good up to the first of October, when the new crop takes the place of the old one, by a proper treatment, viz: About the third week of April remove the barrels of potatoes from the warm room to a cool dry room on the north side of the house, and place the barrels on the north side of the room. The room must be cool in which they are to be kept; for, if kept in a warm room during the warm months, the potatoes will sprout and become with *dry white streaks* through them; in consequence, are not good. But when kept in a cool dry room, as I have stated, they will be good, as I have had them so, and to keep up to the first of October, which is the whole year round.

A. C. C., A JERSEYMAN.

BURLINGTON Co., N. J., 4th mo., (April,) 1869.

Flannel to Destroy Vermin on Birds or Chickens.

NORFOLK, VA., May 6, 1869.

To the Editors of the Maryland Farmer:

Permit me to mention a circumstance which came under my observation, which, if you think is sufficiently valuable to publish, you can do so.

In the Carolinas they regard mocking birds hatched in June as worthless for rearing. The secret is, all birds are more infested with vermin in hot weather than in cool. I learned the fact that mockers are not exempt, by raising a pair hatched in June, and taken from the nest while young, and not knowing what to do with them at night I wrapped them in a piece of flannel. The next morning, to my surprise, I found it covered with vermin, and from an examination of the birds found they had been completely relieved. The birds proved healthy. I then tried the same on a brood of chickens with like effect, placing the flannel under the brood the first night after they came off.

Crops are looking full average.

Yours, truly,

G. F. B. L.

UNIFORM temperature, and a constant supply of moisture, are the prime elements of success in fruit culture; mulching enables us to accomplish this.

QUANTITY OF SEED TO THE ACRE.

To the Editors of the Maryland Farmer :

To correct a serious error in the last May number of the *Maryland Farmer*, and to save the unwary from unnecessary expense and disappointment, allow me to refer to the article on page 140, taken from the *Boston Cultivator*, and authorized by Sanford Howard. Mr. Howard recommends the following mixture of grass seeds for one acre :

Red Clover.....	8 lbs. or 4 qts.
Herds grass, or timothy.....	8 qts.
Red-top.....	1 bushel

By my experience and practice the above mixture is enough to seed THREE acres.

Again, he recommends "twelve or fourteen lbs. of clover seed to seed an acre." If he means the common red clover, he is right, but if he alludes to white clover, it is enough for upwards of two acres. His next mixture for an acre is : "Herds grass, (timothy,) twelve quarts, and red-top, (herds grass,) five pecks"—enough to seed upwards of three acres—and lastly, he recommends for an acre :

Red clover.....	2 qts.
White clover.....	2 qts.
Kentucky blue grass.....	2 qts.
Red-top.....	2 pks.
Herds grass.....	1 bushel.

Granting the seeds, as per estimate, to be fresh and genuine, the mixture is ample to seed SIX acres. I believe that any practical farmer who has grown the grasses extensively will admit that my estimate (guarding circumstances) is correct. To guard the young and scientific farmer, and the *non-reading practical farmer*, I present you with a list of grass and cereal seeds, (unmixed,) which I estimate to be sufficient to seed one acre—allowance to be made for old or inferior seed, size and weight of the seed, and quality of the land upon which it is sown :

Red clover.....	6 q's.	Oats broadcast.....	2 bush.
Lucerne, broadcast..	25 lb.	Millet (for hay)....	1 bush.
White clover.....	2½ qts.	" (for seed).....	1 peck.
Timothy.....	6 qts.	Indian corn, 4x4....	5 qts.
Herds grass.....	1 bush.	Ind. corn, bro'dcast.	4 bush.
Sheep and hard fescue.....	¾ "	Buckwheat.....	1 "
Orchard grass.....	2 "	Bean, cockstone, in drill.....	¾ "
Rye or ray (perennial).....	1½ bu.	Pea, garden.....	¾ "
Sweet Scented Vernal.....	1 "	Irish potatoes, cut..	12 "
Kentucky blue, (1st class).....	1½ pks	Turnip, in drill.....	¾ lbs.
Ky. blue grass (2d class).....	1½ bu.	Carrot, extra clean..	2½ "
Wheat in drill.....	1 "	Parsnip.....	3 "
" broadcast.....	2 "	Onion seed.....	5 "
Rye.....	5 pe'ks	" sets.....	2½ bu.
Barley.....	2 bush.	Field beets.....	3 lbs.
		Rape & winter kale, in drill.....	¾ lbs.
		Sunflower.....	2 qts.

LAWN GRASS MIXTURE, VIZ :

(Extra seeding, but necessary to obtain a compact sod.)

White clover.....	1½ pints.
Herds grass.....	¾ bush.
Sheep and hard Fescue.....	¾ "
Perennial Ray grass.....	¾ "
Sweet scented vernal.....	12 qts.
Kentucky blue, (1st class).....	4 "

In making the estimate for vegetables I allude to farm crops, the rows wide enough apart for a cultivator to pass.

Whilst on the subject of seeds I will refer, if you please, to Mr. Bridgeman (in the same number, page 150,) relative to the vitality of garden seeds. Mr. B. is excellent authority, and in the main he is correct; but, in allusion to cabbage, kale, brocoli, turnip, radish and other round seeds, he has either formed his estimate by averaging the relative vitality between English and American-grown seeds, or he has not experimented or studied the matter sufficiently to make a correct report. Cabbage seed and turnip, for example, imported from England, cannot be trusted after the second year of importation; on the contrary, the same seeds, grown in this country, will retain their vitality, with proper care, upwards of ten years. I found the opinion on the fact, that some years since, I had a lot of winter cabbage seed, of my own growing, which I kept eight years—at that period it vegetated perfectly; after that time the seed was carelessly placed in a damp place, causing it to ferment, otherwise I believe it would have retained its vitality for an indefinite time. The reason is, the humid climate of England causes seed to be puffed up with moisture, and when the imported seed is opened out in our hot, dry climate it dries up and soon loses its vitality; on the contrary, American-grown seed becomes thoroughly dry or cured previous to being sent to the seed merchant. If you wish to test the relative value of English and American seed, ask a reliable seed importer to give you an ounce of cabbage and an ounce of long short-top scarlet radish seed—then take one-third the quantity of your own growing, or strictly American seed, and you will find that your one-third will seed as much ground as England's two-thirds. And why? Because English seed is much larger; or, for a quick solution, as soon as the English casks are opened take out a thimble-full of each, count the seed, and then count an equal quantity of American. In corroboration, ask any prominent London baker or any intelligent American baker, and they will tell you that American flour will make many more loaves of bread than English. The reason is obvious.

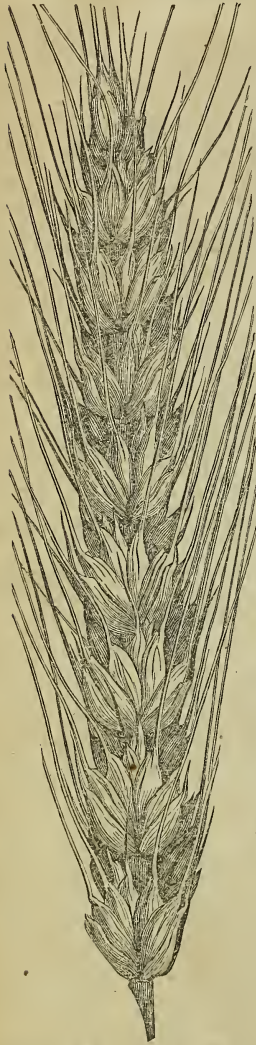
FLOWMAN.

BALTIMORE COUNTY, Md.

CELLARS.—Above all things, says the *Ohio Farmer*, don't neglect to give your cellars a good cleaning out. Remove all decaying vegetables, and everything that produces mould. Give them thorough ventilation, and see that the drain is open, and does the work for which it was made.

Attention to this may save you and your family severe sickness during the season; at least it will contribute to your health to remove these sources of disease. Headaches, rheumatism, neuralgia and fevers can often be traced to neglected cellars as their cause. Clean out your cellars, then, without delay.

French Red Chaff Mediterranean Wheat.



The above named variety of wheat has been longer and more extensively cultivated than any other which has been imported to this country. It has been called by a host of different names, but still remained the same old French Red Chaff Mediterranean. The original seed was imported from France, East and North of the Mediterranean; and the most hardy and best varieties of bearded wheat are still found in the South Eastern districts of France. This variety produces a long, loose head, when fully developed averaging full fifty grains. The head is four cornered, slightly compressed and bearded, the spikelets four-flowered, the berry mealy and farinaceous, making two hundred pounds of flour out of four bushels and a-half of wheat. It has always been a great favorite with all classes of farmers, because of its great adaptability to soil and climate. Under the most adverse circumstances it never failed to produce, at least, something of a crop, and was always the last to be discarded. A wheat that will answer so many different methods of farming, though some are without method, must possess some superior qualities; and I believe, when good, honest cultivation is given to it, and the best seed is selected, it will still repay the farmer better than any other wheat that can be sown. The history of the French Red Chaff is not unlike that of the French White Chaff Mediterranean, in this country. It was sown and re-sown, on the same soil, until it deteriorated so badly that it did not yield a fourth of a crop, simply be-

cause it had once yielded so bountifully. By this process it grew indifferent, and acquired diseases; it became liable to rust; smut seized upon it; insects attacked it and it ripened late. But, in spite of all these acquired defects, it can be restored to a perfectly healthy and productive condition. By sowing on a different soil, by selecting only the most perfect seed, and sowing at the proper time, so that the plant can perfect its roots before winter sets in, it will become as perfect, as hardy, as healthy, and ripen as early as ever. If the wheat plant fails to develop its roots fully in the Fall, or if the ground freezes early so that it cannot reach out its roots and acquire strength and nourishment, it cannot sustain itself through the winter, and is no better than if it were sown in the spring. It needs a fair growth of roots in the fall, and nothing will make up for the loss of this, except, in part, an unusually early, mild spring favorable to the growth of wheat.

To illustrate how easily deteriorated wheat may be restored to healthfulness, I cite the case of a farmer who took such seed and selected from it the best, placed in a pickle of lime and urine, and sowed it on the best land. Selecting seed from this, he took the sheaves and beat the best

grains out over a barrel, the longest and best heads shelling first. Out of this lot he selected only the best grains for sowing. His success was remarkable, and he was said to raise the best crops of wheat in the State. Many persons believed that he had a new kind of wheat, as it did so much better than their own.

His success was due wholly to the wise selections of seed, and the enriching and careful preparation of the soil. His seed was perfect, and the plant found nourishment to sustain it.

He plowed his soil nine inches deep, and pulverized it well, so that the roots of the plant could ramify in it thoroughly.

I believe, with the ordinary care which the wheat plant should always have, that the red chaff bearded Mediterranean is as valuable as any variety that was ever imported. All that it wants is fair, honest cultivation in ordinarily rich soils, and it will repay for this as well as any wheat that can be sown. In a healthy condition it ripens early, and develops perfectly. It will yield fifty bushels to the acre. It grinds perfectly, rolling out volumes of the best white flour, leaving the bran perfectly free.

Perhaps the only reason to be given why imported wheats are best to sow in this country are those arising from changes of soil and of climate, and the fact that they are not so greatly deteriorated as our own.

They are bought in small quantities, sown on the best soil, prepared in the most careful way, and therefore get to be hardy and healthful. Any of our red wheat varieties can be brought back to healthfulness by employing the same method, and exercising the same care. And if it is done I feel confident that they will amply repay for all the extra trouble that is taken.

The French Red Chaff Mediterranean has yielded, for many years, the most satisfactory results. At present it can be found only in a few localities in healthy condition. It has been hybridized, and has developed itself into white wheats, both bearded and smooth. It has also lost its beards, and is known, under a variety of names, as smooth red wheats. Still it is the same wheat, and these may be classified as sub-varieties, which we will give in a future number. The blue stem red chaff may be mentioned as the same wheat only differing in the hardness and color of the straw. Climate and soil have much to do with this changing process; and the French Red Chaff Mediterranean, and nearly all the red bearded wheats, are really the same in different stages of cultivation.

To conclude, in order to have the best crops, use none but the best seed, sow but one bushel to an acre, and only from an inch and a-half to two inches deep; use home-made compost to sow with it, and sow in the month of September in the Middle States. If your soil is thoroughly pulverized, and in good heart, you may be reasonable sure of a good crop.

SCOTCH FIFE SPRING WHEAT.

In order to keep this wheat in a healthy, flourishing condition the seed should be changed from one soil to another, at intervals, and always the best quality selected.

With this precaution the Scotch Fife is reasonably sure to yield a good crop. It resembles the Canada Club, a white chaff, smooth wheat, with a fairer berry than the Scotch Fife. In some soils when sown together it is difficult to distinguish them, some soils having a greater influence on the berry than others. Their general appearance is much the same, and they may have been the same wheat. The little difference now existing may easily have been caused by growing in different soils and climates.—The annexed cut gives a correct representation of the Scotch Fife. It is a smooth, white chaff amber, with a short well set head, and well filled, as most of the spikelets fruit. It produces a stiff, short, hard straw, is well suited to a variety of wheat soils, and yields from thirty to thirty-five bushels per acre.

It is said to have been imported from Russia into Scotland, and from thence brought to this country, where it has generally yielded well. It belongs to the white chaff, beardless, amber variety, and is distinct from most spring wheats in its hardness, and strong, wiry straw. It is seldom attacked with rust, as the straw is not luxuriant, and though sown on very rich soil it seldom lodges.—*Dietz's Farm Journal.*



Scotch Fife Spring Wheat.

INDIAN CORN.

Yellow and white corn are not the same in quality, although they are identical in kind, and grow in the same field.

The nutritive qualities of the yellow corn surpass that of the white, and that is a good reason why the common sense of the people or their ordinary experience, assigns to it a preference, independent of its mere looks.

The investigations of vegetable chemistry have revealed to us an important and interesting fact. By the aid of analysis, it has been ascertained that butter in a pure state is combined in all grass seed and grains.

Out of one hundred weight of yellow Indian corn meal, for instance, a good chemist can extract from eight to ten pounds of butter. Out of the same weight of Indian meal six or eight per cent. of butter can be made, thus proving it to be in that proportion so much the less nutritious quality of Indian meal. Any one can satisfy himself by attending to the usual process of cooking it. When it is boiled thick for mush, if crust adheres to the side of the vessel, on cooling, it is apt to peel off itself, owing to the fatty material in it.

It has furthermore been proved that the butter obtained from the milk, is not animal secretion, but what previously existed in the pure and original state, in the hay or food of the cow; and a skillful chemist can make more butter out of one hundred weight of hay than a cow can, as the cow must appropriate a considerable share of it for the uses and necessities of her organization. Give a cow a hundred pounds of hay and she will render back eight pounds of butter, but an expert chemist can realize twelve to thirteen pounds out of it.

In the choice of the various articles of food to suit our tastes on particular occasions—to correspond to the multiplied emergencies of life—the adaptation of the multifarious qualities of food, display infinite wisdom and goodness. In sickness, in health, in toil, while our means abound, when they are scanty, we demand different kinds of food and different varieties of the same kind to satisfy our real and imaginary wants. Of the grain stuffs, rice contains the least fatty material, and Indian corn the most, and ranging between these two extremities we have wheat, oats, rye, barley, &c., all different, and yet all of them capable of being applied to the respective conditions which are united to them.

It is because of the fatty nature of Indian corn meal that it is such a strange kind of food, and that persons unaccustomed to it cannot endure it. The nations which feed principally on rice are not near so robust as those which use Indian corn, as the blacks of the South mostly do. Persons unaccus-

tomed to this kind of food, therefore, will do best to commence with the white Indian corn meal, in preference to the yellow, as it is not so rich; and this preference to the white over the yellow has already occurred in England, where the articles are new.

There is only one more observation which I wish to make. As Indian corn meal contains so much fat in it, kept too long it is apt to become rancid, and it is the more or less unfit for use. In the shipments made to the West Indies the meal is commonly kiln dried, to obviate, as much as possible, this tendency to rancidity. For reasons just detailed, the white meal will keep rather better; and from its being lighter and milder, it as much preferred for use in warm climates as the yellow for similar inducement is in cold.—*Milling Journal*.

A MODEL FARM.

A correspondent who accompanied the Mayor and City Council on a recent survey of the Western Maryland Railroad, with the view of making an appropriation for its completion, thus briefly describes Mr. Welty's farm:

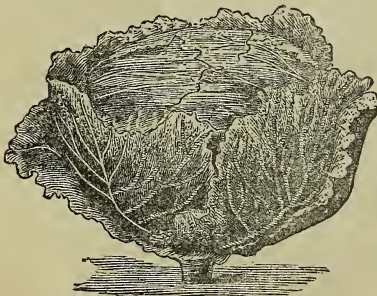
"Mr. John Welty's farm in Washington County, Md. is a model of thrift and comfort, and is a fair sample of many in the neighborhood. He has three hundred acres under cultivation. A large spring bubbles up besides the dairy, and forms a good size pond, which is plentifully stocked with speckled trout. A pound fish had sought the shade of the dairy, and lay perfectly motionless, while half dozen or more persons stood over and discussed its weight and beauty. The dairy contained two hundred gallons of milk and a quantity of choice golden-hued butter. Not far away a hundred or more fat hogs, averaging nearly three hundred pounds each, grunted contentedly in the straw. Besides the management of his farm, Mr. Welty, runs a distillery, and the Welty whiskey is the beverage *par excellence* of the surrounding country; while a good deal finds its way to Baltimore, where it is drunk as Eichelburger."

BRINING WHEAT.—T. S. Clough states in the *Prairie Farmer* that he once brined and thus thoroughly cleansed seed wheat for thirty acres. He took the small and inferior grain thus abstracted and washed again. From this he sowed a very few bushels, the result from which was inferior wheat in both quantity and quality; all the remainder was fine, free from oats and smut, and produced a large yield. He then came to the conclusion that "As ye sow, so shall ye also reap," and if anybody persists in sowing smut and dirt, instead of good, sound, plump grain, they may expect to reap accordingly.

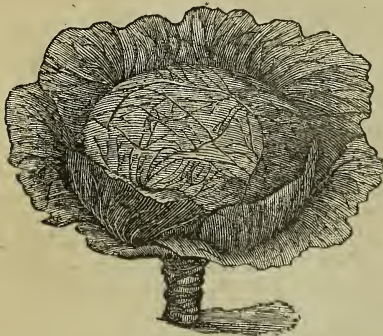
THE CABBAGE TRIBE.

The Cabbage requires a deep, rich soil, and thorough working. If these requirements are met and good seed obtained, there is no difficulty in obtaining fine, solid heads. For early use, the plants should be started in a hot-bed or cold-frame; but seed for winter Cabbage should be sown in a seed-bed, early in the spring. Some varieties seem to do best if the seed is sown in the hills where they are to remain; and this is particularly the case with the Marblehead varieties. Sow two or three seeds where each plant is desired, and then pull up all but the strongest. The large varieties require to be planted about three feet apart; the small, early sorts, from a foot to eighteen inches. Always give Cabbage a deep, rich, soil, and keep it mellow.—For early winter use, keep a few in a cool cellar. The main crop will be better kept out of doors, set in the earth closely, and covered with straw or leaves, with a little earth over all.

We are indebted to James Vick, of Rochester, New York, for the following illustrations of the different varieties of the true Cabbage, with the brief descriptions, which we copy from his Illustrated Catalogue and Floral Guide for 1869. We shall continue in subsequent issues other varieties of the Cabbage, as well as other vegetables.



EARLY SCHWEINFURTH.—A new valuable early Cabbage, for summer and autumn use, and of large size.



FLAT DUTCH.—Good for fall or winter crop, resembling the Drumhead.



FILDERKRAUT.—This is comparatively new, but has become the general "crout," or "kraut" of Germany. I imported the seed directly from Filder, where it originated, at the request of some of my German customers.



DRUMHEAD SAVOY.—One of the very best winter Cabbages.

ASHES FOR PEAS.—The *Rural New Yorker* says: "A woman sends us the following from her diary of her market garden: 'In the spring of 1866, in sowing peas we ashed some in the row, leaving other rows unashed. The difference was very remarkable. Those that were ashed were more thrifty, of a darker, richer color, producing at the time of picking larger pods and a superior quality of peas. The same is true of turnips.'"

WOODEN COLLARS.—Having published several articles in regard to wooden collars, &c., sent us by some of our prominent farmers, we have repeated inquiries as to the manufacture and sale of such, and shall be glad if any one of our subscribers can inform us where they are manufactured, with prices, &c.

The Apiary.

SINGULAR FACTS ABOUT BEES.

Prof. Huxley, of London, has delivered at the College of Surgeons a series of interesting lectures on the "Invertebrata." In one of the lectures, devoted to the description of the class "*Insecta*," he furnished some interesting information in regard to the life and habits of that familiar insect, the bee. Speaking of the so-called social insects, bees, wasps and ants, he says:

These insects are distinguished not only by their combining together in great numbers, but also by the species presenting itself under three or four distinct forms. Thus, in the bee we have (1) the working bee or imperfect female, (2) the drone or true male, and (3) the fertile female or queen.—Sometimes in the ant there are four distinct forms, for the working ants are divided into two sets—(1) the ordinary workers, and (2) other workers exclusively concerned in defence, these are the soldier ants; they have large heads and strong mandibles.

In regard to the bees one point is soon made out, viz: that the drones are true males and that the queen is an indubitable female. But the true condition of the workers was only made out after much investigation. They are simply females stunted in their development, for they possess stings (which are peculiar to females) and other features of female organization.

To follow out the history of a hive, we find in early Spring the comb of the last year containing a great mass of bees—workers, and one larger than the rest, the true queen. At this period there are no males and no *larvæ*. The first operation consists in the waking up of the hive. The workers sally forth and collect honey and pollen. These workers or neuter separate into two divisions—one party is employed in collecting food, the other in turning it to account when collected. These latter, the well fed ones, hang themselves up in bunches in the hive, and the nutriment they have received is converted into wax, which is separated from the body and passes out between the abdominal rings. After this period of rest they set to work and employ the wax to build up cells. The others return to the hive, and regurgitate the saccharine matter that they have collected into the cells which the other set have formed. Other cells, at this period, are ready for the deposit of eggs. For this purpose the workers build up three different kinds of cells. The cells for the workers and the drones do not greatly differ, but those for the queens, only a few in number, are larger and not hexagonal, but rounded.

The Queen marches along the rows of cells and

drops an egg into the open mouth of each. The eggs are elongated, and stick to the bottom of the cells, so that every cell contains an egg. The *larvæ*, when they emerge from the egg, are all perfectly similar—they possess no feet and are perfectly helpless, so that they have to be fed. For this purpose the working bees store up in their crops a chylous substance, which they regurgitate into the cells of the *larvæ*. During the last six days the food supplied to the cells is of the same character—but after this period the Queen *larvæ* continues to be supplied with the same form of highly elaborated food, but the others are then fed on a mixture of honey and pollen.

After a time the *larvæ* changes into a chrysalis, the lid of the cell is shut down and covered over with wax, and the first changes are undergone. In the first place there is a vastly greater number of worker cells made than queen cells, and these workers emerge first, and take their share in the work of the hive. By and bye the young queen is ready to pass out of her cell—she then makes a kind of chirping noise—at this the old queen gets into a great rage and tries to destroy the young one, but the workers assemble round their new queen and repel the attacks of the old sovereign respectfully, but firmly. Then on a sudden accession of rage the old queen deserts the hive, followed by a certain number of workers, who form an escort for her. This is what is known as the first *swarm*—the old queen with her new followers found a new home. Soon after this there is a second swarm, participated in by the new queen and a numerous escort—they ascend high up into the air and again return to the hive. This ceremony installs the new queen into office, and she is prepared to perpetuate the existence of the hive, and remains in common until the birth of a new queen on the following Spring, when she, enraged at the evidences of affection which are manifested for a new comer, leaves the hive in disgust, and founds a new home.

We have now another difficulty to solve. Why is it that out of a worker's cell there always proceeds a stunted female, out of a drone's cell a male, and out of a queen's cell a perfect female? Some bee keepers soon found out how the difference between the neuter and the queen was brought about. It was noticed that the hive loses its queen sometimes, and then, if not six days old, the living workers were able to convert any grub they chose into a full grown queen, simply by altering the condition of its life—they enlarge its cell, alter its shape and continue to supply it with highly elaborated nutriment, therefore no arrest of development takes place; a perfect female insect is formed.

The pear and apple are from Europe.

THE MARYLAND FARMER

AT \$1.50 PER ANNUM,

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E. WHITMAN, }

BALTIMORE, JUNE 1, 1869.

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THE GROWING COTTON CROP.—Owing to the excessive rains, attended with cool and unseasonable weather, the accounts as to the condition of the cotton plant in Alabama, portion of Mississippi and along the Atlantic coast, are very discouraging.—In Texas, Louisiana, and in that vicinity, the weather has been favorable; but the overflow of the rivers in those States has for some time threatened considerable damage, as yet, however, without serious results. But, taken as a whole, the crop is now without doubt very backward and unpromising. Replanting has become necessary in some districts, and is going forward as rapidly as circumstances will permit.

WHEAT BINDER.—We have had exhibited to us recently a model of a machine for binding wheat, which is really very ingenious, and we should think in the hands of some of our manufacturers of Reaping machines could be brought into practical use.—It is proposed to be attached to any of our reapers, so as to accomplish the long desired object of reaping and binding at the same time. It is the invention of our young fellow-townsmen, Mr. Wm. DeCourcy May, who may be addressed at Baltimore.

Spinach was first cultivated in Arabia.

Subscriptions to the Maryland Agricultural Society.

The officers of the Maryland Agricultural and Mechanical Association finding the amounts appropriated by the State and City insufficient for their purposes, have made an appeal to the citizens of Baltimore with the following handsome result:

Wm Devries,	\$1,000	Jos H Riemann,	250
Chas M Dougherty,	1,000	S Orendorf & Son,	250
E Law Rogers,	1,000	Wesper Dressel,	250
Benj W Jenkins,	1,000	John L Wickes,	250
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Wm T Walters & Co.	500	Kimberly & Moorhead	100
Chauncey Brooks,	500	Schwerdtman & Co.	100
A J Albert,	500	G Cassard & Son,	100
John M Orem,	500	W J Riemann & Son,	100
Ham Caughey,	500	J D Hammond & Co.	100
E M Greenway, Jr.	500	Stephens, Miller & Co.	100
Gilmore & Son,	300	Geo P West,	100

In addition to the above liberal subscriptions the Butchers and Drovers of Baltimore have subscribed over \$5,000 in aid of the enterprise.

The subscription books have not all been returned to the Secretary, and we are confident that a sum not less than fifty thousand dollars will be obtained from citizen subscribers. The subscribers having a common interest in the property of the Association with the City and State, the judicious selection of the grounds cannot fail to prove a profitable investment.

We would suggest to the members of the Corn and Flour Exchange the policy of opening at once books of subscription, as it appears to us these gentlemen have been entirely overlooked in the solicitations of the committee. Coming as they do directly in contact with the farming community, they should be the first to respond to an appeal in which they are interested more than any other class of our citizens. If the gentlemen composing the finance committee are successful in obtaining a liberal amount, we may look the coming fall for an exhibition never equaled in this State, and competing with the best ever gotten up in this country.

THE WHEAT CROP IN MARYLAND.—The reports that have reached us throughout the entire State indicate that the wheat crop will be over an average one.—From the breadth of land sown and the large application of fertilizers made in the fall, with the present promise of a large yield, our farmers may anticipate a busy time with their Reapers.

CORRECTION.—In the May number of the *Farmer* an error occurs which should be corrected. In the article of *Plowman*, on the "*Cultivation of Large Late Indian Corn*," on page 137, we make him say "seed grown south of Philadelphia," it should have been north, of course.

Draining--Its Effects, Cost, &c.

A correspondent in Mount Olive, N. C., writes us requesting that an article be prepared for the "June number on Draining, its effects, cost, &c., having no doubt it would add materially to the circulation of the *Farmer*."

We have from time to time published a great many articles on the subject of draining and its effects, but if our correspondent or others desire to possess themselves of a full treatise on the subject we would advise them to purchase some of the standard works on the subject.

Allen, in his "*New American Farm Book*," the best extant, a new edition of which has just been issued from the press of Orange Judd & Co., New York, in speaking on this subject, says:

"This subject of 'underdraining,' in all its ramifications, requires a treatise of itself far too extended to enter into a work of this character. Books have been written on the subject in all its length and breadth of development. We, therefore, refer the reader to either of the volumes of French or Waring, which may be readily found in the agricultural bookstores of our principal cities.

"Indeed, this subject of underdraining has become so important in all heavy soils, worth, in their present condition, fifty dollars an acre, that their value may be doubled, for crop producing purposes, by the simple outlay of \$30 to \$40 in the simple process of underdraining, which will last a lifetime."

Mr. Klippart, of Ohio, has also written a treatise on the subject of draining of a very exhaustive character.

Young Men Leaving Home.

NEAR PETERSBURG, VA., May 3, 1869.

To the Editors of the *Maryland Farmer*:

In reading your excellent magazine for February I noticed a very able article from D. L., dedicated to "Young Men." I am very glad to see that some one is trying to induce the country boys to stay at home and work mother earth, instead of running about to seek homes in cities and towns, which ninety-nine out of every hundred are doing that can raise money enough to go, or to go West—to return home fit subjects for the county poor-house. I have tried both, not from any inclination on my part, but from force of circumstances that were caused by the late war. As soon as an opportunity presented itself, however, I went to work with my own hands, and now I find that I have more money ahead than any clerk in the cities of Richmond or Petersburg that commenced work after the surrender of Gen. Lee. Many thanks to D. L. for his able articles. I hope he will continue them from time to time.

Yours, very respectfully,

A YOUNG FARMER.

Parsley was first known in Sardinia.

POTASH.

DARNESTOWN, MONTGOMERY Co. March 23, '69.

To the Editors of the *Maryland Farmer*:

In reading your valuable journal I notice that "Potash" is frequently mentioned as one of the articles necessary to make certain crops. As the lands in this entire region is *singularly deficient* in that article, I write to ask that in your next number you will answer the following enquiries:

1. What is the precise *commercial name* of the article used on land?

[Potash or caustic soda.]

2. What does it cost, and where is the farmer to purchase it on the lowest terms?

[Price 9½ to 10 cents per pound, and to be had of R. J. Baker & Co., Baltimore.]

3. How is it to be prepared for and applied to lands, and what quantity should be applied per acre?

[If the commercial article is used it should be dissolved in water, and used at the rate of 200 pounds to the ton in connection with other manures.]

Annual Fair of the New England Agricultural Society.

A combined Annual Exhibition of the New England Agricultural Society and the Maine State Agricultural Society is to be held at Portland, Maine, commencing September 7th, to continue four days. The very liberal list of premiums made up by the Trustees of both Societies, at a joint meeting in Boston, can but commend it to the farmers and others of New England and elsewhere. The Massachusetts Ploughman in speaking of this united exhibition, says:

"The Trustees of the Maine State Society submitted a proposition of the most liberal character, the acceptance of which by the New England Society leaves nothing to be desired on their part. That the people of Maine, and especially the citizens of Portland, will exert themselves to render the coming exhibition most imposing and successful in the history of the Society, there is not a shadow of doubt.

The premiums tell the whole story. They indicate the determination of the New England Agricultural Society to make their next annual meeting an imperial success.—There is no department of agriculture which this carefully prepared list does not penetrate and will not stimulate.—Old and young, male and female, father and son, mother and daughter, are invited to present the best results of their industry for competition for the prizes, and for the public inspection and admiration. Now, farmers of New England let the work of preparation begin with this very day; and lay your plans broadly, so as to be worthy of the prizes and honorable tokens with which the society would invest your efforts. Study the premium list until you feel its influence working in your daily thoughts and aims."

SPECIAL NOTICE.—We call particular attention to the premium (\$100) offered in our advertising columns for Essays on Cooked Food for Stock. This offer should enlist the pens of the most competent writers to discuss the subject thoroughly, as it is a very important one.

GEORGIA.

Things Agricultural—David Dickson, the Cotton Oracle—Other Successful Planters.

The following we extract from a very highly interesting letter from QUONDAM, the special correspondent of the *New York Times*, who is making an agricultural round of observation through the "land where cotton grows."

SPARTA, HANCOCK COUNTY, Ga., May 1, 1899.

Although the recent heavy rains, with but short intervals of fair weather, have somewhat retarded planting operations, on the whole the agriculturists of Middle Georgia are "well up" with their work, and cotton planting may be said to be almost finished. Most of it is up and looking healthy and strong. Corn, too, of which I am glad to find a much larger area has been planted than was at one time supposed, is looking very well, and unless something disastrous and unforeseen happen, the crop will be large, even for the number of acres planted, because "book farming," hitherto so much derided, has been much more largely adopted than in previous years.

Of all the counties outside of what is called, *par excellence*, the cotton district of Georgia, this Hancock County is the most productive. Here reside and plant Mr. DAVID DICKSON, Mr. SIMPSON and Mr. TURNER with a number of faithful imitators and disciples, and nowhere can there be found more thoroughly skilled professors of practical farming, than the gentlemen I have named. It is incalculable the good they have done in their neighborhood, and, indeed, in every part of Georgia their example and precepts have proved beneficial. They have demonstrated the value of scientific agriculture, of system and of intelligent industry, and have exposed the wasteful folly of the old system of scratching the surface, extracting crop after crop until the land becomes perfectly exhausted, and then repeating the process, never dreaming of using manure, and believing that breaking the land more than a couple of inches "kills" it. The individual, in the fable, who killed the goose that laid the golden egg, was provident compared with the farmers of the old school. Thousands and thousands of acres in every county, now grown up in stunted pines, and presenting a barren red surface, were once good land. They are now the slaughtered geese that laid golden eggs.

Messrs. DICKSON, SIMPSON and TURNER have proved that lending money to their land is the best and most lucrative investment, and that improving the land they have got pays better than buying "new ground" when the old is exhausted to barrenness. At first they were regarded as crazy men. Plowing the soil with two and four horses, and with large turn plows, and using guano and commercial fertilizers, were considered "all foolishness." It was thought they "must break at that business," and that applying from ten to twenty dollars' worth per acre of that "stuff that smells so bad," was, in itself, sufficient proof of lunacy. After some time, however, it appeared that they gathered and sent to market a much larger number of bales of cotton than their old-fashioned neighbors; that their corn-crisps were fuller; that they had more wheat in their bins; that their horses, mules, cattle, wagons, harness and implements were in better condition and lasted longer than those of the primitive school; and that they never owed anybody a cent, and always had plenty of money. They were the first to use the commercial manures liberally, and the first to find that it paid better than any other investment of capital to use them at a cost of even \$20 per acre.

The result is now that no county in Middle Georgia produces as much per acre of arable land as Hancock County, although the soil generally is extremely poor from the ill-usage of the ante-Dickson days, and no county in proportion to its size uses anything like the same quantity of the guanos, phosphates and land-plaster.

Mr. DAVID Dickson who, I believe, commenced life as a storekeeper (dry goods, &c.) in this village, is now universally admitted to be the best, most successful and most intelligent planter in Georgia. He is not by any means the largest planter, however. Mr. LOCKETT, Mr. LEE JORDAN, Captain JOHN A. COBB and others in south-western Georgia, plant double and treble the quantity of land, own double and treble the number of mules, horses, &c., and employ very many more laborers, but at the end of the year take the number of bales per acre of all the plantations and Mr. Dickson incontestably carries off the palm. He raises from a bale to a bale and a half on all his land, and on parts of it produces as much as three bales, or 1,500 pounds of lint cotton. To look at his plantation you are not struck by

any particular neatness, fancy fences or evenly-divided fields. On the contrary, you are disappointed at the rough, untidy appearance of the face of the farm. But the stock look well. The plowing is admirable, the hands work systematically, and the crops in all their stages of growth look more vigorous and healthier than those of other people.—Mr. Dickson is an eminently practical man. He has no idea of aesthetics. He does nothing for appearances. He does everything to make money. He is ill-educated, an old bachelor and devoted to putting one dollar on the top of another. Year after year since he went to farming and quit dry goods, he experimented with manures of different kinds for cotton, at first on a small scale and cautiously, until he discovered that the combination of genuine Peruvian guano, land-plaster, and dissolved bones and salt was the "perfect manure" for cotton, and once found, he "made a note on't," and has used it lavishly, being, I believe, the largest individual customer of JOHN MERRYMAN & Co. of Baltimore. He has contributed many useful, instructive and eminently practical articles, or the substance of articles, to the *Southern Cultivator*, in which he has given detailed accounts of his mode of culture. Without any pretension to scientific skill, and without using a term that every farmer cannot understand, he has explained the whole process of cotton culture in its smallest minutiae, and has described all the implements which are used and which are the most effective. He seems to have devoted all his intellect to the study of how to raise the most cotton on a given quantity of land, has pursued the study laboriously and patiently, and has found that by deep culture before seed time, and heavy manuring, and by very shallow and frequent culture while the plant is maturing, he can produce from two to three bales per acre upon the ordinary uplands of one of the poorest counties in Georgia.—If he is to be honored who can make two blades of grass grow where one grew before, how much more is Mr. Dickson to be honored, who has made two or three bales of cotton, worth \$150 per bale, where 150 pounds of seed cotton, worth \$13, used to be made before?

This year, stimulated by the high prices, and encouraged by the large sums he received last year, Mr. Dickson has planted very largely, with great care and with great quantities of guano, dissolved bones, plaster and salt. He sold all of his cotton seed that he could spare, at from \$2 to \$5 per bushel, in a few weeks after it was known that he would sell them, thus adding from \$60 to 150 per bale to the value of his cotton, and daily receives hatfuls of letters asking all sorts of questions as to "how he does it."

I have written chiefly about Mr. Dickson, because people speak of him more than they do of others. He has been more "written up" than Mr. SIMPSON or Mr. TURNER; but, personally, I am confident that Mr. SIMPSON is quite as skillful, quite as successful, and quite as intelligent a farmer. He raises a species of cotton superior to Dickson's, more prolific, less given to weed, and of earlier maturity. Some people call it the cluster cotton, from the bunches of bolls close to the stalks and on the short limbs. The staple is very fine, and all who have tried the Simpson cotton are satisfied that it is equal to the best. From all I can learn, Mr. SIMPSON makes as many bales per acre as his better-known fellow-citizen, and, while he says very little, does a great deal. He is a very intelligent gentleman, and has the advantage over Mr. Dickson that he is married and has a family.

The negro laborers are working well and faithfully.—The complaints are few. There are not as many hands employed this year as before, because they are not here to be employed. Many have gone to the Georgia negro's Mecca the City of Atlanta; many have gone to work on the new railroads, some have died, and some have "gone to themselves," that is, rented a few acres of poor land, on which, with a wretched old mule, scant provisions and nobody to urge them to work, they cannot possibly make a livelihood. I have seen a great deal of "going to themselves" among the negroes during the last three years. In not one case in a hundred has it resulted otherwise than in lamentable failure.

THE KANSAS FARMER.—This excellent agricultural monthly is regularly received. It is edited by Geo. T. Anthony, Esq., and published at Leavenworth, Kansas, at the low price of \$1 per annum. It is devoted to the Farm, the Shop, and the Fireside—and it deserves the encouragement of farmers of that or any other section.

The Manufacturer and Builder.—The May No. of this illustrated monthly of 32 large quarto pages, devoted to Practical Interests of Industrial Progress. Those engaged in the Arts or Mechanics should not fail to subscribe—they could make no better investment. Western & Co., 37 Park Row, New York—\$1.50 per annum.

Horticultural.

MANAGEMENT OF A YOUNG ORCHARD.

Thinking that a few desultory ideas upon the management of young orchards, by "one who has tried it," may not come amiss to those who have young orchards set out, I have written out the following, which, should you deem advisable, may prove of use to some of your many readers.

With regard to *cultivating the ground*, everybody knows that keeping the ground loose and free of weeds and in a friable state near the surface, is absolutely necessary in raising a hill of corn; but everybody *does not* seem to know that the same treatment is indispensable with regard to fruit trees when young and growing. Such, however, is the case, and those who expect good fruit by merely planting trees and leaving them to take care of themselves will find their half-done work to end in disappointment and loss.

Wheat, oats and grass, when suffered to grow near a young tree, will rob it of its proper nutriment and produce results as unfavorable as the growth of weeds around a hill of corn. Corn, beans, potatoes or onions may be grown in a *young* orchard, but none of them should be planted within *four* feet of the trees, and in all cases the ground should be kept clear of weeds and loose on the surface.

Young trees treated in the above manner, upon a rich dry soil, will grow with great rapidity and will produce fruit in half the time as those allowed to take care of themselves or even those which are robbed of their nutriment by the constant renewal of crops of grain and straw.

With regard to *pruning*, there are probably as many young trees injured as are benefited by pruning, from the work being done either in a wrong manner or at a wrong time. Still there is a proper time and a right way to do it, which adds much to the value of the orchard. This, however, must depend in a great degree upon the skill and judgment of the cultivator. I will venture, nevertheless, to give a few hints which may prove of use to the inexperienced.

First, let it be premised, that the size of the tree is increased alone by food prepared in the leaves, and may therefore be said to grow downwards instead of upwards. It must be obvious then that every healthy limb which is pruned off injures the growth of the tree. Why then prune at all? I answer, for two very good reasons.

First—to prevent the top from growing too thick, and secondly, to prevent too many primary limbs from growing out of the trunk. A tree will remain sound and healthy to a great age provided *the bark can be kept sound*. The cutting off of small limbs

does little or no harm, as the wound begins to heal over before the wood begins to decay, whereas the cutting off of large ones is dangerous to the future health of the tree, as decay ensues before the wound is protected from the atmosphere by healing over.

It is therefore proper that not more than three or four limbs be allowed to start from the main trunk and that these should grow at right angles to the main trunk, for if they are suffered to run up near together they will, when they attain a considerable size, come in contact and *pinch*—that is, enclose the bark between the branches; when this is the case the limbs are very apt to split off when the tree comes into full bearing.

By giving the pruning and secondary limbs the *right direction* in the start, there will afterwards be but little use for saw or knife except to prune away small limbs which are beginning to decay or such as cross each other and chafe.

The most common error in pruning is committed by making an effort to *hurry* up the main stem to its full height for a top by depriving it of all its side branches, which is literally "killing it with kindness." This suggestion, however, pertains rather to the nursery than to the orchard. I have found from experience that the nearer to the ground (with in reason) the primary limbs start the better the tree will grow.

As to the time of pruning, I do not think it is material, provided the limb taken off is small, but taking off limbs of any considerable size in winter is certainly a bad practice. The young orchard should be gone over just as the leaves begin to start in the spring, the tops thinned out when they are too thick, the eggs of caterpillars taken off, the root examined to see if the borer has been or is there, and then thoroughly washed with soap-suds or rather with common soft soap diluted with an equal amount of water.

If there are any holes in the bark of the tree, made by insects, fill them with a piece of soap or putty; in a month after take a second look at the borer; if he is there you will detect him by his borings or rather his sawdust, for he cannot make a hole in the wood without leaving some sign of his depredations.

Again, in July, go through the orchard with the knife and also give the trees a second coat of the wash.

We have few varieties of apples which, if cultivated so as to grow too fast, are liable to winter kill, but not so with the peach tree, for if made to grow too fast the wood of the succulent sprouts does not become sufficiently hardened before cold weather sets in; of this the last winter gives ample proof in the killing of the most rampant shoots and branches, though it requires an unusually severe winter to produce this effect.—*Cor. Germantown Telegraph.*

WASH FOR FRUIT TREES.—Last year an experienced fruit-grower, the owner of a fine orchard near Niagara river, Western New York, wrote us that in the care of his trees he had practised one simple method with eminent success. He takes lye from leached ashes, mixes a little grease with it, heats quite warm, and with a syringe throws it up into all parts of the trees, branches and trunk. It will effectually kill all kinds of caterpillars and all kinds of worms that are either infesting the trees in nests or running over the bark. Trees treated in this manner were exceedingly healthy, beautiful and vigorous in appearance, possessing a smooth, glossy bark, and bore the best apples in the country. The remedy is easy and cheap.—*Horticulturist*.

TO ENTRAP ANTS.—Peter Henderson, in his *Practical Horticulture*, says: "Although these are not generally to be found in the green-house or flower garden, yet we have occasionally suffered by them, and have found the simplest way to destroy them to be to lay fresh bones around their haunts. They will leave everything else to attack these. When thus accumulated, they can easily be destroyed by dipping in hot water."

LIST OF TWELVE BEST PEAR TREES.—Cultivators will find the following one of the very best selection, for a list of twelve first-class pears:

Doyenne d'Ete, Rostiezer, Bartlett, Belle Lucrative, Louise Bonne de Jersey, Sheldon, Seckel, Duchesse d'Angouleme, Beurre d'Anjou, Lawrence, Dana's Hovey, Glout Morceau. The above are arranged in the order of ripening, and are all first-class pears for either market or family use.—*Horticulturist*.

TO DESTROY BORERS.—S. A. Ladd, in *Journal of Horticulture*, destroys the apple borer when he is in the tree too far to be reached with the point of a knife or a wire, in this way: Take a piece of half-inch lead pipe, say three feet long; bind one end to nearly right angles, and fit the same to the borer's hole, the main length of the pipe standing perpendicular; place a funnel in the top and fill the pipe with boiling water; the borer will soon be dead, while the tenderest tree will not be injured by the process.

A GRAND FIELD OF WHEAT.—Mr. John W. Knotts, near Hillsborough, says the *Easton Star*, has the finest field of wheat in Talbot county. He has about 40 acres, as thick as it can stand, and as high as a man's head. If no disaster overtakes it the yield must be magnificent. The fertilizer applied to his fields was J. J. Turner & Co.'s "Excelsior," at the rate of 170 to 190 pounds to the acre.

Grape Culture.

ROOT GRAFTING OF GRAPE VINES.

A correspondent inquires about the mode of root grafting of grape vines. We annex the details as follows, by an experienced grafter:

In the first place, see that you get good ripe wood, not less than one-quarter inch in diameter—less may do, but is not certain. Keep this damp in sand or moss in a cellar until the ground opens in the spring, (I have performed on the 22d February with success;) remove the earth about three inches deep, select a smooth place, saw off the vine six inches below the surface, unless that comes on the roots, in which case it may be performed near the surface; pare smooth with a clasp knife, split down the stock in the middle; prepare the graft by cutting one inch above the bud and three below; wedge it the same as in other grafting; insert as usual, but be careful to have the line between wood and bark of stock and scion to be in an exact line with each other; the outside must not be a guide, as the bark of the stock will be much thicker than that of the graft. Fit the graft in firmly, and if the stock is still weak, tie around it with twine or loose matting, so as to hold the graft firmly until it has caught hold by growing, by which the bandage will decay and not hinder the growth of the vine. Never use wire, as I have seen some recommend.

Now take the earth and press it closely and firmly around the joint of grafting, but be careful not to move the graft; fill up to the bud; leave the point sticking out; over this put loose manure or weeds, or anything that will prevent frost from lifting the graft out, "or your labor is lost." This will keep out frost, and will prevent your bud from drying out. About the time that vines begin to grow, it will be well to examine occasionally to see if the bud starts. The covering must be kept loose, and as the graft progresses, taken away entirely. Suckers arising out of the root must be carefully removed, and oftentimes a degree of patience is necessary, as I have known the grafts not to start until July, when they began and grew well, ripening most of their wood. When they start thus late, it is well to pinch the end of the shoots about the first of September. My usual success in this kind of grafting is about 90 per cent.

FACTS IN GRAPE CULTURE.—William Saunders says that he holds two undeniable facts in grape culture: 1st, that the best fruit is produced on the strongest and best ripened shoots; and 2d, that the shoots produced from spurs never mature so thoroughly as those produced from terminal buds. Farther, that properly ripened fruit will never be produced from unripened wood. Fruit apparently well colored may be seen on green growths, but such fruit does not possess the characteristics of a well ripened bunch of grapes.

THE CANADA THISTLE--*Cirsium Arvense*.

A correspondent at Bowensville, Va., writes us as follows on the subject of the Canada thistle:

"The Yankees introduced into this section of country a weed (called, by some, Canada thistle) that is likely to prove a great pest to our soil. If you or any of your correspondents know of a remedy for it you will confer a great favor by communicating the same through the *Farmer*. At present it is confined to the old camps, but we are fearful of its spreading."

In order that our correspondent and readers generally may be on the alert for this pest, and to take it at its first appearance, we present the above drawing of the plant, with description and mode of eradicating, which we copy from the *Country Gentleman*:

"This is a formidable weed in two respects. It spreads extensively by seed, and the roots being both perennial and creeping, the plants quickly extend into patches beneath the surface. The roots have been sometimes found several feet below, in porous subsoils; and as the fragments of roots are sufficient to produce new plants, it was formerly supposed to be incapable of eradication, without digging out every portion, which, in a large patch, would involve immense labor. This opinion has now been found to be fallacious, and by the observ-

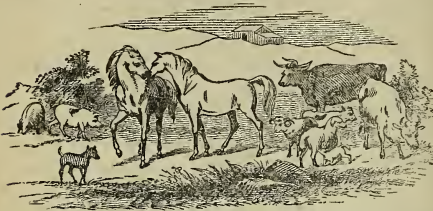
ance of a simple principle, the whole subterranean net-work of roots may be easily destroyed. *The roots cannot live, unless they breathe through their lungs, their leaves.* Keep the portion of the plants above ground from growing, and the whole patch may be destroyed in a single year. This may be accomplished in several ways. Small patches may be smothered by covering them with boards, closing the joints with a second layer, to prevent a single plant from finding its way through. Sawdust, tan or straw, will accomplish the same end, if laid on thick enough. If a single plant, however, escapes, it will sustain life in a portion of the roots. Another way is to cut the plants off daily even with the surface of the ground, so that a single leaf cannot grow. The best way for common practice is to plow them under, and continue the plowing often enough to keep them smothered. If well and deeply done, once a month will answer the purpose. This mode succeeds best on heavy or clayey soils, which do not permit the thistles to find their way readily upwards. But even on such soils, the work must be very carefully performed, for if a portion of the weeds are but partly covered, they cannot be destroyed. On gravelly or other porous soils, it is more difficult to destroy them by plowing. The operation must therefore be more frequent on such soils, and greater care taken to do it deeply and in the most thorough manner. The Double plow will be found to answer an excellent purpose on these as well as all other kinds of soil."

A writer in an exchange gives the following mode of eradicating this weed:

"These are a troublesome pest, and but few persons know how to rid themselves of them. Some try by plowing and raising a crop of corn or potatoes. This method, however, does not succeed, as the thistles grow more luxuriantly under this treatment. The writer has, repeatedly, known them to be killed by summer fallowing—the plowing and harrowing being done only in dry weather. Another effectual mode is, to enrich the land where they grow, and when the crop has attained maturity, say in July, mow in a wet time, or just before a rain, and the hollow stubs will drink in so freely the descending water, as to kill the roots. I have myself proved the efficacy of this latter method in several instances, and I know of a number of others who have tried the experiment with equal success."

HENRY WARD BEECHER says: "The only way to exterminate the Canada thistle is to plant it for a crop and propose to make money out of it. Then worms will gnaw it, bugs will bite it, beetles will bore it, aphides will suck it, birds will peck it, heat will scorch it, rains will drown it, and mildew and blight will cover it."

Live Stock Register.



TREATMENT OF YOUNG COLTS.

Every man who raises colts should have an easy fitting halter—the five ring leather halter is the best, but a rope head-halter will do, always something that he can not break—and put it on every colt when he is but a few days old, when he can be easily handled. Lead him around with it a little, just enough to let him feel its restraint. Then tie him in the stable where the mare is, but a little distance from her, being careful to place him where he can not get his feet hung, and watch him till you are satisfied that he “accepts the situation.” You may then leave him an hour or so, when he should be turned loose. This operation should be repeated several days, and the mare may be led away to water while the colt is tied, and then she may be used for a hour or so, thus gradually accustoming them to be separate, and in a short time the mare may be used in the field or on the road three or four hours, while the colt is tied in the stable, and neither of them manifest much restlessness.

It is very often desirable to use the mare where it is inconvenient to have the colt following, but unless they are accustomed to the separation while the colt is quite young, she will become restless and unfit for use, especially if she is of nervous temperament. When the colt is haltered, he should be curried and petted, but never in any case should he be teased so as to leer or put himself in an attitude of self defence. Treat him so that he will always be glad to have you near him.

A colt thus accustomed to the halter, may be tied to the collar of the harness when it is necessary to take the mare away from home for the entire day. He will very soon learn to walk quietly by the side of the dam, and is not liable to get lost when you go to the city, or where there may be many other horses.

If the colt is tied a considerable portion of every day while the mare is at work, he should be turned loose as soon as she returns, and have the privilege of the pasture or lot as much as possible; indeed, after he has become well accustomed to the absence

of his mother, he may be left in the yard or lot when she is taken to the field for work, *provided* the fence is high and tight.

Colts thus treated will be docile and easy broken to the harness, and if the practice of tying them in the stable at nights is kept up, they will be worth twenty per cent. more when three years old than they would be if they were never handled.—*Journal of Agriculture.*

EXPERIMENTS IN FEEDING PIGS.

R. Hyslop, of Green county, Ohio, gives the Cincinnati *Gazette* the result of his experiments, as follows:

“In turning over the leaves of my day-book, I came across the record of an experiment I had with a sow and pigs. In 1861, I had a sow of good common stock which had seven pigs on the second day of January. On the second day of April, the sow and pigs had eaten thirteen bushels of raw corn and common slop from the kitchen once a day. The weight of the pigs separately was 47½, 42½, 39, 35½, 33, 28½, 28½ lbs., collectively 254½ lbs. The pigs were separated from the sow, and fed raw corn and common slop from the kitchen until the 25th of June. They had eaten seventeen bushels of corn since they were weaned, and weighed, collectively, 455 lbs. This was a mere experiment to ascertain how much pork a given quantity of corn would produce.”

[In the above experiment it will be seen that from the time the pigs were weaned, April 2d, up to 25th of June, seventeen bushels of raw corn, together with the kitchen slops, gave an aggregate increase in weight of 200½ pounds. That in every bushel of raw corn, with the aid of the kitchen slops, made nearly twelve pounds gross weight of pig pork. Our correspondent fails to state whether these pigs were shut up, or had the run of a pasture, whereby grass formed a part of the feed. If they were shut up the experiment shows a fair profit in raising pigs, even when fed on raw corn. But if the corn had been cooked, twelve bushels would have gone as far as the seventeen bushels, thus showing a much larger profit.]

RINGING BULLS.—The *American Stock Journal* gives the following:

“Secure the patient firmly by the horns to a beam or cross-bar. Take a small line and make two half-hitches and a round turn on his lower jaw; then make fast, and all is ready. Take a long narrow-bladed knife, ground on both sides at the point; feel with your left hand till you come to the end of the bone, and then give a prod with the knife with the right hand, and you have a place for the ring.”

A correspondent in Colman's *Rural World* communicates the following :

"CURE FOR LICE ON HORSES AND CATTLE.—I have found out a thing that may be very useful to many of our farmers; it may be known, but I have never seen it in print. It is a *sure*, and I believe the cheapest cure for lice on cattle and horses. I bought a fine blooded colt, a few days ago, which was very lousy. Not knowing what would kill the lice, I went to the drug store to inquire, when the druggist, Mr. E. A. Vogt, told me to use a solution of arsenic, and gave me five cents' worth, which was sufficient. I put it into an earthen vessel, and poured about two gallons of boiling water on it, and applied it warm with brushes, thoroughly wetting the skin and hair. One application was sufficient. This, although a poison, can be used with perfect safety, and will not hurt the animal in the least. I used it on my colt and it worked like a charm, there not remaining a live louse, and it cost *only five cents.*"

MILLET FOR HORSE FEED.—Millet hay is excellent food for horses; it should be cut when the seed is in a milky state, before it becomes fully ripe. It is quite as nourishing as timothy, and horses become fond of it. The seed is superior to oats for horse-feed and a superior food for poultry—producing eggs in abundance. The seed for feeding stock ought to get ripe, and even the straw, when permitted to ripen, will be eaten by horses in winter. From half a bushel to three pecks of seed may be sown to the acre.—*American Stock Journal.*

STAGNANT WATER.—Stagnant or foul water is injurious to all animals. It causes blood poisoning, and this leads to many febrile complaints, and is one of the great causes of abortion in cows and other animals.

SALE OF ALDERNEY CATTLE.—We call attention to the advertisement of Mr. C. H. Shinn, of Haddonfield, New Jersey, offering for sale his pure bred Alderneys. The reputation of Mr. Shinn as a breeder is a guarantee of the quality of his herd.

Maj. W. T. Sutherlin, president of the Virginia State Agricultural Society, has issued an address to the people of Virginia, in which he warmly recommends to their attention the interests of that institution, and sets forth its uses and advantages. He thinks the next Fair will equal, if not surpass, in interest and in the variety of articles on exhibition, as well as in the number of persons who will be present, any ever before held in the State.

Pennsylvania farmers grease their peas before planting them, to prevent them from rotting in wet weather.

USEFUL RECIPES.

REMEDY FOR BLIND-STAGGERS.—A correspondent in monthly Report of the Agricultural Department, gives the following: "Bleed largely from the neck; 2d. Stimulating clysters of salt, thin gruel, and warm water, injected by a large horse syringe every day; 3d. Counter irritation over the entire forehead, by blistering with boiling water, from the spout of an ordinary tin coffee pot, the eye being protected by a flannel roller, closing the lids firmly, and pouring the water in a small stream; 4th. The bicarbonate of soda internally, two ounces at a dose, in a quart of lukewarm water every six hours. Over one and a half pounds were administered (from a bottle in the ordinary manner of drenching) with a view to its desibrinizing effect upon the blood."

REMEDY FOR SWELLING OF HORSES LEGS.—Dr. Murray says in the *Western Rural* that chronic swelling of the leg, caused originally by carking on the postern joint, and which has increased so that the leg is enlarged up to the body three times its natural size, is best kept down by constant exercise, but when it remains in spite of this, a couple of drachms of iodide of potash should be given every day in ball and this continued for a fortnight or three weeks. Very high feeding is bad for horses subject to inflammatory swelling of the legs.

REMEDY FOR COLIC IN HORSES.—Take one pint of whiskey, half a gill of spirits of turpentine, and half a gill of spirits of camphor. Dilute these ingredients in water sufficient to fill a quart bottle. Use it as a drench, and it will afford relief in ten minutes.—*Cor. Carolina Farmer.*

HOOF BOUND IN HORSES.—To cure hoof bound, rasp the top of the hoof very thin for an inch or more all around the hoof, so as to bring a little blood. As the hoof grows it will give room for the full play of the joint in the middle of the hoof. Hoof bound is caused by a contraction and lack of elasticity of the outer rim of the hoof. It takes about a year for a horse's hoof to become entirely new.—Six months will remedy the lameness caused by hoof bound, if treated as suggested.—*Am. Stock Journal.*

THUMPS IN HOGS.—A correspondent in the *Southern Cultivator* gives the following as a "sovereign cure for thumps in pigs and hogs. I have it from good authority that it is as equally as good for *cholera*. Take of pulverized madder, 8 ounces, sulphur 8 ounces, Black Antimony 4 ounces, pure saltpetre 4 ounces, epsom salts 2 ounces; mix and rub to a fine powder.

Dose.—One teaspoonful of powder in four tablespoonsful of water every other day.

I have found that two, at farthest three, doses do the work. The pig or hog should be thrown on its back, and the mixture out of a cup, poured by spoonsful down its throat."

TO ARREST A SKIN DISEASE.—A *Southern Cultivator* correspondent writes: "One of your subscribers desires to know what will arrest a skin disease or breaking out on his 'cheval.' If the gentleman will give his horse a large dose of sulphur for six consecutive days, and then bathe the 'raw' places once a day with a decoction of 'Poke Root,' and two hours afterward with a solution of sugar of lead, keeping up this treatment six days, I will vouch for the recovery of his horse. The sulphur will drive to the surface all the impurities that belong there; and the decoction mentioned will arrest the itching humor, and destroy the animalcules which frequently cause skin disease among stock, and the solution will take out the inflammation, and the soreness which said decoction will produce."

SMUT IN WHEAT.

Assuming that smut is a disease affecting the vitality of wheat, I claim that good cultivation will assist to eradicate the disease, while bad cultivation will tend to increase the evil. Our instructors used to say, "Never sow only when the dust will rise, and follow the harrow." I am satisfied that sowing when too wet tends to increase smut; while sowing when the ground is in good tilth will have a contrary effect. But sowing such large crops, and an acknowledged necessity of early sowing, often compels sowing when too wet.

I have sown spring wheat commencing with brining and liming it, then by using ashes in the place of lime, then by brining alone—then sowing dry without liming, all sown on similar land and condition—at least side by side and within two days. The result was no smut from the limed and ashed seed—some smut in the brined sowing and still more in that sown dry. I should have mentioned that the seed sown was smutty, and have often noticed that smutty seed sown dry usually produced smut, while seed in which there is no smut sown dry when the land is in good tilth, seldom produces smut.

Wheat is now mostly sown by machinery, and brined and limed seed has a tendency to clog, hence the necessity of adopting some other preventive. I have found blue vitriol, properly applied, always effective.

It may be dissolved in water, and used at the rate of one to two ounces to the bushel, sprinkled and evenly worked through the body of the seed a day or so before using, or it may be more evenly applied by brining, and dissolving the vitriol in the lime. "Too much work to brine all the seed!" Nonsense, Mr. Editor, let me tell you how I do it almost as fast as to run it through the mill. Take two baskets—one bushel each is most convenient—tight enough to hold wheat, and two tubs, one with the vitrioled brine in it, large enough to allow the basket to sit in it; force down the basket, and pour in the wheat, not too fast. Skim with the hands, and stir and skim until the oats and light wheat are mostly out; lift out your basket with the wheat, and set it upon the other tub to drain, while you are preparing another basket in the same manner, when the first basket will be ready to empty, and so continue until the job is done.

By using good strong brine you will free your seeds from oats more surely than by any ordinary anning mill, and also will float out much light wheat that has just vitality enough left in it to produce smut, and the vitriol will produce its renovating effect more evenly than by any other mode that I am acquainted with.—*Cor. Prairie Farmer.*

The sunflower was first brought from Peru.

HOW TO USE SUPER-PHOSPHATE.

We have inquiries from several subscribers on this point, and as there are several ways of using this material with different crops, we propose to give an article that will answer all at the same time.

For grain crops, as barley, on which super-phosphate produces a marked benefit, there are two ways in which it may be applied, either sown broadcast like plaster on the soil, at the time of seeding, and harrowed in with the seed, or on the crop after it is up, and before the young plants have become too far advanced—say when they are an inch or two high.

For potatoes, we should apply it in the drills or hills, either at the time of planting the seed, by dropping it along the furrow, or in the hill at that time; or, shortly after the plants are through the ground it may be strewn over them.

For root crops generally, it is best to apply by sowing it along the drills either at seeding time or very soon afterwards, except with turnips, with which crop it is usual to apply part of the super-phosphate, (say two-thirds) in the drills at the time of covering in the manure, and the remainder is reserved to be dusted on the young plants as soon as they appear, in order to quicken the growth and keep off the turnip fly.

For Indian corn, field beans, or squash, it is usually applied in the hill, mixed with an equal bulk of unleached ashes, and given at the rate of a handful of the mixture to each hill, as soon as the plants are an inch or two high.

On grass or clover, sow broadcast, about the first to the middle of May, in the same manner as plaster is usually applied.

For garden crops it is best to apply by incorporating it with the top stratum of the soil by sowing thereon as soon as it is forked or spaded over, intermixing by means of a hand rake when making the beds. Afterwards some more may be given by dusting it over the young vegetables soon after they come up.

As a general rule it will be found that from 100 to 200 pounds per acre will be sufficient for field crops; more is sometimes given to turnips, but as the effects of superphosphates are not permanent in the soil like bone dust or ground bones, it pays better to apply some each year to the crops intended to be benefited, than to put on a large dose at one time. It is soon dissolved by rain, and what is not taken up by the roots of the plants, in their early stages of growth is apt to get washed beyond their reach before the end of the season.—*Canada Farmer.*

Big rocks or heaps of stumps look well when draped with grape-vines.

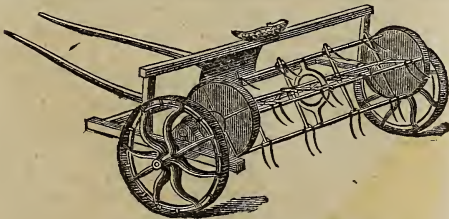
EXPERIENCE WITH HAY TEDDERS.



BULLARD'S TEDDER.

We have been asked so many times what is the practical value of the Hay Tedder on small farms as well as large ones, and which is the best for general use, that, to answer all these inquiries at once, we will give our own experience in their use:

In common with other farmers, we had long felt the need of a machine for stirring hay by horsepower, when in June, 1865, we happened to see, at Boston, one of Bullard's patent. After a careful examination of the working principle of the machine, and inquiring of the Plow Company, who very frankly admitted the liability of the forks to break, we bought a two-horse, eight-fork one, and used it two years—cutting about one hundred tons annually, and running the Tedder through nearly all of it, except only such places as were rough and stony. Then it was sold and a one-horse American Tedder with sixteen forks procured to take its place, which for two years has received a more thorough trial, if possible, than the other, as it has been used on all ground, however rough and stony, running it everywhere except in swales too soft to bear a horse.



AMERICAN TEDDER.

The operation of both of these Tedders is entirely satisfactory, the principal objection to the Bullard being the breakage of forks, which was very frequent, involving a delay of perhaps an hour a day on an average, for repairs. Sometimes this could be attended to early in the morning, at others the machine must stop when time was priceless, and the delay of an hour involved the loss of a load or two of hay. The American Tedder at the end of two

years has never caused a delay of a moment for any purpose, and is now as good as new. It is driven at a fast walk over stones and other obstructions a foot high and over any stone heap, the speed never being slackened or the machine thrown out of gear for such impediments.

Both machines were used in all kinds of grass, not excepting clover. The Bullard Tedder throws the grass higher and faster than the American. It handles clover a little too roughly. The American picks it all up from the ground and leaves it light. There is not much difference in the draft of Bullard's for two or the American for one horse. It is as hard as working a horse on a two-horse mower, perhaps a trifle harder. We had no difficulty in mowing, tedding and raking four to six acres a day with a span of horses in the "hot term" last July. Always getting done in time to put it all in the barn the day it was cut. It is an advantage to use one horse, as it allows a change, giving a fresh horse for the rake.

As to the practical value of the Tedder, it is too obvious for argument. It frequently pays for itself in a day, in saving hay from being spoiled. Ours has done this repeatedly. A Tedder will pay for itself on a farm where there is 15 tons of hay to cut.
—Vermont Farmer.

THE PEA WEEVIL.—The pea weevil (*Bruchus pisi*, Linn) is a small beetle of the curculio family, which lives through the winter in its perfect state, generally in the pea where it passed its earlier stages of existence. In the spring it lays its eggs on the young and tender pods of the early crops of peas; when hatched, the little grub penetrates into one of the green peas within, and there takes up its abode, eating the contents of the pea, but always leaving the hull untouched till it has gone through all its changes to the beetle state. As there is but one brood of this insect in the year, an excellent mode of lessening its ravages is to grow a second crop of peas from the seed obtained from a very early crop, and keep the seed produced by the last crop for sowing the next year. The first crop will be attacked by the insect, but the second crop will be entirely free from it. We should say, keep your late grown, or second crop, peas for seed, the next year your loss by the insect will be reduced to a minimum.

It is always a bad practice to reset young trees in an orchard or in the same holes from which old, decayed fruit trees have been taken away. The reason is this: the rotting and decaying at the trunk and roots produce a fungus exceedingly injurious, tainting the soil. If any one will examine the land, he will find it full of a network of decayed wood, and the only way to plant the ground successfully is to grub out the old roots and burn them, apply lime and cultivate well. Young trees may then do well.

NEW BOOKS.

THE NEW AMERICAN FARM BOOK. Originally by R. L. Allen; revised and enlarged by Lewis Allen, author of *American Cattle*, editor of the *American Short Horn Herd Book*, &c. Published by Orange Judd & Co., New York. For sale by HENRY TAYLOR & Co., Baltimore. Price \$2.50.

This book first made its appearance in 1846, and was received at the time of its publication as a careful and judicious digest of the various matters appertaining to the then less generally understood science of farming. As revised and enlarged it contains within its pages a vast amount of really valuable information and attains to the rank of a standard work on the subject on which it treats. Starting with soils, their classification and management, the editor passes thence to the questions of manures, both organic and inorganic; of irrigation and modes of tillage. Then follow chapters on the grasses, grain, leguminous plants and roots, fruits, &c. A miscellaneous chapter succeeds to these, and the next division of the work takes up farm buildings and their adjuncts, domestic animals, horned cattle, the dairy, sheep, working animals, swine and poultry. Another chapter is devoted to the diseases of animals, and the final chapter to general remarks.

From this it will be seen that the *New American Farm Book* covers nearly the whole ground essential to a knowledge of agriculture and to the implements and animals connected with that pursuit.—The book will therefore be found a valuable addition to any farmer's library.

HANEY'S ART OF TRAINING ANIMALS. A practical guide for amateur or professional teamsters, giving full instructions for breaking, taming and teaching all kinds of animals, &c., &c. Published by Jesse Haney & Co., New York. For sale by HENRY TAYLOR & Co., Baltimore. Price 50 cents a copy for paper cover edition, \$1 for the cloth.

This book is a curiosity in its way, and is gotten up in a cheap but popular style, with illustrative wood cuts. Of the merits of the work as a whole we are not competent to judge, for its scope extends beyond the mere training of animals for ordinary uses. It gives instructions for teaching circus tricks and professes to tell how serpents may be charmed and birds taught to talk, to sing and to perform various exercises and evolutions. There is no doubt, however that it will afford some instruction to those who seek it, and in other respects will serve to while away an occasional hour quite pleasantly.

FARM IMPLEMENTS AND FARM MACHINERY, and the Principles of their Construction and Use: with Simple and Practical Explanations of the Laws of Motion and Force as applied on the Farm. With 287 Illustrations. By John J. Thomas.—Published by ORANGE JUDD & Co., New York. For sale by HENRY TAYLOR & Co., Baltimore.

The first publication of this most useful book occurred many years ago, and no simpler, clearer or better treatise on agricultural mechanics has yet been issued. The present edition is in so far an improvement on the earlier one in that it introduces the latest inventions in farm implements and machinery. To those who desire to obtain a knowledge of the laws of motion and force as applied to farm uses, we do not know any work that is at once so plain and so practical. Having frequently had occasion to consult it ourselves, we can cordially recommend it to others.

PARSONS ON THE ROSE. A treatise on the Propagation, Culture and History of the Rose. By Samuel B. Parsons. Illustrated. New York: Orange Judd & Co. For sale by HENRY TAYLOR & Co., Baltimore. Price \$1.50.

This new and revised edition of "Parsons on the Rose" must prove acceptable to every lover of the Queen of Flowers. The amateur as well as the commercial gardener will find this book a perfect manual for their guidance. It contains the following divisions: "Botanical Classification;" "Garden Classification;" "General Culture;" "Soil, Situation and Planting;" "Pruning, Training and Bedding;" "Potting and Forcing;" "Propagation;" "Multiplication by Seed and Hybridizing;" "Diseases and Insects attacking the Rose;" "Early history of Rose, origin," &c.

THE drumhead cabbage is perhaps the best for field cultivation; grown on a good loam and well manured from fifty to sixty tons have been gathered from an acre.

OURS.

It chanced on a beautiful summer night,
When the moon was young, when the stars were bright,
And the blossoms slept in the tender light,
And dreamed of the zephyr's sighs;
That a wondrous spell in our home was wrought,
Of hopes and fears and bewildering thought,
By a fairy flower that an angel brought
From the gates of Paradise.

The south wind fluttered its perfumed wings,
And essayed the song that the bulbul sings;
And the firefly sparkled in mystic rings,
Like lamps at a fairy ball;
The young leaves, whispering sweet and low,
In a tongue that only Dryads know,
Made love to the waves that danced below
To the chant of the waterlily.

The cloud-ships lay in the far-off west,
With their masts and spars and sails at rest,
Or floated along in an idle quest
Of some bright Elysian Isle;
And fairy gondolas here and there
Moved down the streams of the upper air,
And moored their prows to the shadow stair
Of some Gothic palace-pile.

So the hours of that summer night were told,
The starlight faded from river and wold,
And morning, in garments of purple and gold,
Awakened the sleeping earth;
But the cherub form, with its face so fair,
Crowned with a glory of golden hair—
Like the morning sunshine gleaming there—
Still nestled beside our hearth.

Ladies Department.

OUR CHILDHOOD.

BY GEORGE D. PRENTICE.

'Tis sad, yet sweet to listen,
To the soft wind's gentle swell,
And think we hear the music
Our childhood knew so well;
To gaze out on the evening,
And the boundless fields of air,
And feel again our boyhood's wish
To roam like angels there.

There are many dreams of gladness
That cling around the past—
And from the tomb of feeling
Old thoughts come thronging fast;
The forms we love so dearly
In the happy days now gone,
The beautiful and lovely,
So fair to look upon.

Those bright and gentle maidens,
Who seemed so formed for bliss,
Too glorious and too heavenly
For such a world as this;
Whose dark, soft eyes seemed swimming
To a sea of liquid light,
And whose locks of gold were streaming
O'er brows so sunny bright.

Whose smiles were like the sunshine
In the spring time of the year—
Like the changeful gleams of April,
They followed every tear!
They have passed—like hopes away
And their loveliness has fled;
Oh, many a heart is mourning
That they are with the dead.

Like the brightest buds of summer,
They have fallen with the stem;
Yet, oh, it is a lovely death
To fade from earth like them!

And yet the thought is saddening
To muse on such as they
And feel that all the beautiful
Are passing fast away;
That the fair ones whom we love
Grow to each loving breast
Like the tendrils of the creeping vine,
Then perish where they rest.

And we can but think of these
In the soft and gentle spring,
When the trees are waving o'er us,
And the flowers are blossoming;
And we know that winter's coming
With this cold and stormy sky
And the glorious beauty round us
Is budding but to die!

A SWEET VOICE.—We agree with that old poet who said, that a low, soft voice was an excellent thing in woman. Indeed, we feel inclined to go much further than he on the subject, and call it one of her crowning charms. How often the spell of beauty is rudely broken by coarse, loud talking. How often you are irresistibly drawn to a plain, unassuming woman, whose soft, silvery tones render her positively attractive! In the social circle how pleasant it is to hear a woman talk in the low key which always characterizes the true lady. In the sanctuary of home how such a voice soothes the fretful child, and cheers the weary husband.

A DOMESTIC REMEDY FOR TOOTHACHE.—Equal quantities of powdered alum and common salt, well mixed together will often cure the toothache when it will not yield to most other remedies.

FOR THE MARYLAND FARMER.

A VOICE FROM "OLD GRANNY."

Having washed the breakfast dishes—put on the dinner to boil, exercised myself with the oil of broom stick, and finished up all domestic matters, to my utter dissatisfaction, I embrace the interim to enlighten your benighted Southern subscribers on a few subjects of vast importance to the rising generation, and Southern matrons in particular.

I heard young Hopeful say the other day to his Pap:

"I say, Pap, who is Willoughby Newton, who asks us the question, 'what must we do?'"

"Well, Mr. Stupid, he is one of the first men in the Old Dominion—has plenty of rocks and brains of the rarest quality."

"Then, Pap, soon as I can bring my dormant faculties into locomotive action I will give him my views, on Domestic Economy, and how to cultivate corn, tobacco, beans, potatoes and other important information relative to his welfare."

"Well, son," said Pap, "mind to dot your i's and cross your t's."

Wait a bit Mr. Quill and Scissors, the pot is boiling over, and my "nose tells me the bread is scorching."

With pen and ink in hand, and spectacles wiped off by the end of my check apron, I again sit down to commit to paper, strictly original and important information, and as our Parson says, without farther prelude, I commence:

Tart Rhubarb Pudding vs. Apple Dumplings.

Peel and cut up the Rhubarb in the usual manner, roll out wheat dough mixed with a piece of suet about the size of a piece of chalk, or an apple—cover the Rhubarb with it, form the pudding oval, and wrap around it a cloth—secure it by strings at either end and a few stitches in the centre—boil a full hour. Send it to the table on a hot dish. Cut in half inch slices and season with butter and sugar, a sauce of the same; or, if you have an eye to economy, use a sauce made of sugar-house syrup and butter, or sweet lard; talking about economy, feed the little boys and girls on bonny-claber and molasses—and the pigs on the former.

Poultry.

If your poultry are disposed to scratch or bask on seed beds or hills, strew over them about half an inch of white sand, plaster, or anything white will do; sand is best because it does not become dissolved by rain. Try it—'tis no humbug. To prevent a hen from setting, confine her in a coop without food about three days. I suppose the reason is, it allays increased fever. The best thing to be done with a hen that is out of favor with the cockerel, or refuses her quota of eggs, is to convert her into a pot of soup.

Tomato Figs.

Collect a lot of ripe tomatoes about one inch in diameter, skin and stew them in the usual manner, when done lay them on dishes, flatten them slightly, and spread over them a light layer of pulverized white or best brown sugar; expose them to a summer's sun, or place them in a drying house; when as dry as fresh figs, pack in old fig or small boxes, with sugar between each layer. If properly managed the difference cannot be detected from the veritable article.

Croup.

If hot water is at hand plunge the child's feet in it and administer a dose of castor oil; rub his feet dry, draw on a pair of woolen stockings, and put him to bed. A cravat of mashed ice, and a lump to suck is a relief, as a last but a filthy resort let Pap expectorate tobacco juice down the child's throat—"any port in a storm."

Poke vs. Asparagus.

I have had Poke for dinner since the first of April, and ex-

pect to cut it till the 25th of May—on the contrary, asparagus is not ready to be cut till about the 5th of May. Poke is of spontaneous growth, requires no cultivation, and is nearly as rich and savory as asparagus. It is cooked and dressed in the same manner as asparagus—as regards heavy manuring and cultivation it requires neither. The stalks and lower part of the leaf stems of poke is the only part that is cooked. It may be cut till it attains a height of six inches, after that stage of growth it is said to be poisonous.

To give you an idea of the shrewdness of my protege, I will give you a little scrap relative to a practical joke he played off on Pap last Easter day.

"Pap," says he, "will you pick eggs?"

"Yes," said he, "if the eggs you pick with were not stolen from my hen house."

"Agreed," said Hopeful, "I have got but one and that I purchased with the two cents given me by mama for minding the baby; I will wager that with that one egg I will break a dozen of your selection."

"Done," said Pap.

"Well, here is at you," said Hopeful, "Let it be point to point—if you win I will agree to live on oyster shell soup a week, but if I win, your eggs are mine."

"All right, drive in."

First crack down to the dozen. Paps eggs went by the board.

"Now, Pap, I'll renew the bet—get another dozen and redeem your reputation. I will pick my butt against your pints."

"Very well, bring 'em up," the result was Hopeful again won.

"Now, son, I believe that thing you call an egg is artificial."

"Well, Pap, if that is your belief I will wager my two dozen against your old rooster that my egg is bonafide."

"Prove it, son, or by Julius Caesar I'll — break it in that saucer."

"Pap, I want it for clearing the coffee!"

"Well, son, 'tis an egg, that's a fact; take the rooster and two pullets with him. Now, Hopeful, tell me where you got that egg, and what breed the hen was that layed it?"

"Well, Pap, it was the Guinea breed—I got it at the Centre market, and 'tis the largest I could find; I covered it with sharp vinegar till the red specks disappeared, and that's all."

"Well, boy, I advise you not to tell the boys, they may become as finished a rogue as you are likely to be. You know my son, from little streams great rivers flow."

"Yes, Pap, and from large oaks small acorns grow."

I subscribe myself, as young Hopeful calls me,

OLD GRANNY.

TO RENDER PICKLES GREEN WITHOUT COPPER OR OTHER POISONOUS SALTS.—This may be done even without scalding the vinegar and salt in brass or copper vessels, by merely steeping the leaves of the grape-vine or those of spinach or parsley in the vinegar. The use of earthen vessels glazed with lead should also be avoided as a solution of the acetate of lead is inevitably the result, acting as a slow poison in the system, and like the use of lead in hair washes, lotions for the skin, lead pipe for water conduits, etc., very frequently ending in paralysis. The large pickled cucumbers imported into this country from Holland in wooden kegs are not colored green by any of these artificial means and are not only the most welcome, but also the most palatable of any.

FURNITURE POLISH.—Take two ounces of beeswax, cut fine; spirits of turpentine, one ounce; one drachm of powdered resin; melt at a gentle heat, and add two drachms of Indian red to give it a mahogany color.

Pamphlets, Catalogues, &c. received.

Cincinnati Board of Trade—Report on Southern Railroad Connection.—We have received from the Hon. Josiah Kirby, Chairman of Committee on Southern Railroads, the very concise and able report in favor of the City of Cincinnati, Ohio, aiding in the construction of a railroad through the States of Kentucky and Tennessee, to connect at Knoxville, or some other desirable point, with the Southern system of roads.—The report clearly sets forth the great advantages to be derived from the said connection—and also recommends to the State Legislature a Bill for their passage giving the city full authority to aid in said enterprise. It also submits numerous "Views of the Press" favoring the project.

Catalogue of the University of Virginia.—From John R. Woods, Esq., we have received a copy of their Catalogue for the forty-fifth Session—1868-69. It embraces an entire list of the Faculty, names of the Students, terms of admission, &c. This University ranks among the highest in our country.

American Dairymen's Association.—We have received the fourth annual Report of this Association, for the year 1868—to which is added the Annual Report of the Ohio Dairymen's Association for the same year. It contains a Lecture by Prof. John Gamgee, on "*Diseases of Cattle and the Influence of those Diseases on Milk.*" Also annual address of Hon. L. D. Griswold, before the Ohio Association, together with other important transactions.

Floral Guide and Catalogue of Flower Seeds.—From Wm. H. Lyman, Leverett, Mass., his abridged edition, containing over 600 varieties of the choicest Flower Seeds, &c., &c.

Land and Fresh Water Shells of North America.—From the Hon. J. A. Garfield, we have received a copy of this Valuable Manual, by W. G. Binney and T. Bland, prepared at the instance of the Smithsonian Institution, at Washington—it is numerously embellished and contains some 320 pages.

Life of Jefferson Davis, with the Secret History of the Southern Confederacy.—We have received from the National Publishing Co., Philadelphia, advance sheets of Mr. E. A. Pollard's new work. Will he do justice to the Chief of "The Lost Cause?"

Address on Agricultural Education.—Delivered by Andrew D. White, Esq., President Cornell University, before the New York State Agricultural Society.

The New Eclectic Magazine.—The June No. of the Eclectic is received—it still maintains its high standard of excellence. Turnbull & Murdock, Baltimore, publishers. Yearly \$4. It is now united with "The Land we Love," Gen. D. H. Hill, being a partner and co-editor.

Tilton's Journal of Horticulture.—This monthly is on our table—it is magnificent in its literature and typography—elegantly embellished. Boston, Tilton & Co.—price \$3 per annum.

The Reconstructed Farmer.—The first No. of this new agricultural monthly is on our table. It is gotten up with ability, and neat in typography. We commend it to the farmer and planter. Published and edited by Thigpen & Dancy, Tarboro, N. C. Terms \$2 per annum.

The Countryman.—This is the new name of "The American Farmer's Magazine," now in its second volume. It is gotten up in good style and worthy the patronage of the farming community. Cincinnati—published by Charles S. Burnett, at \$1.50 per annum.

Old trees that have become stunted and unfruitful, are often started into new growth and fruitfulness by a dressing of decomposed bones.

The Poultry House.

FRENCH FOWLS.

The following is a short description of the three new varieties of French fowls:

CREVE CŒURS.—Plumage, brilliant black, sometimes a little gold or silver tinged; a large and beautiful crest; large two-horned comb, sometimes toothed; close and thick beard, and handsome pendant wattles of a brilliant red color. The neck is of medium length, well arched, and covered with a very thick glossy hackle. The legs are black or slate color, short, and free from feathers. The thighs are large and fleshy, supporting a long and square body, with a broad, full breast, and rather large, closely set wings; the tail is full and well sickled, altogether giving them a very upright, handsome carriage. They are very tame, ramble but little, and seem better contented at home than wandering afar off. They are great layers, eggs are very large, and they continue laying a long time. They mature early and are fit for the table at three and four months old, frequently weighing $6\frac{1}{2}$ pounds when well fattened. Non-setters.

HOUDANS.—Plumage invariably black and white spangled; a crest of the same color; comb, triple, the outside opening like two leaves of a book, and the centre having the appearance of an ill-shaped, long strawberry. With the cock the comb is very large, while with the hen it should be under medium size. The legs are strong, and of a lead color, with five claws, the two hind ones one above the other. Whiskers and beard strongly developed both in cock and hen. They are of extraordinary precocity and fecundity; they lay large and white eggs, and the chickens are fit for the table at four months old, and weigh, without the intestines, about $4\frac{1}{2}$ pounds. The weight of an adult, dressed, is 7 to 8 pounds. Non-setters.

LA FLECHE.—Plumage brilliant metallic black throughout; comb branching, like two horns pointing straight up; long wattles; both comb and wattles a brilliant red; white ear lobes; long curved neck; long and strong thighs and legs, the latter black or slate color; a long broad body, with deep full breast; with a rather small tail carried low; carriage very upright and dignified. Non-setters, laying enormously large eggs, but not so many as the two previous varieties.—*Am. Stock Jour.*

BRAN FOR HORSES is an excellent antidote to the constipating effects of corn meal. Horses fed through the winter upon fine feed, are liable to sickness in the spring. This is avoided by feeding bran with meal, and it loosens the bowels.

TOBACCO CULTURE.

IMPORTANT CORRESPONDENCE WITH MESSRS. THOMAS J. HALL & Co.
Prominent Tobacco Commission Merchants.
BALTIMORE, May 11, 1889.

Messrs. Thomas J. Hall & Co.

Gents:—You will greatly oblige by giving us any information you may have, reports from customers, &c., in reference to the application of Rhodes' Tobacco Manure.

Your early reply will confer a favor on,

Yours, truly,
B. M. RHODES & Co.

BALTIMORE, May 12, 1889.

Gentlemen:—Your note of May 11th came to hand yesterday. As regards the efficacy of your Tobacco Manure, we can but say that in the only case it came under our personal knowledge it proved very effective, there being such a decided difference between the Tobacco fertilized and that not as to impress most favorably those who witnessed its effects. The application which came under our personal knowledge was used on the farm of Mr. T. J. Hall, Jr., and its effects were witnessed by Mr. T. J. Hall, of our house, Mr. Benj. Tongue, Mr. Wm. Sherbert, Col. R. T. Estep, Capt. Robert Perry, all of whom live in the neighborhood, and by Dr. Hammond Stewart, of Calvert county. The application was about two hundred pounds to the acre, and its effects very marked in the growth of the Tobacco.

Respectfully, yours,
THOMAS J. HALL & Co.
Messrs. B. M. RHODES & Co.
No. 82 South Street.

HOOFLAND'S GERMAN BITTERS.

There is probably no disease to which "human flesh is heir, that is more distressing in its effects than that of Dyspepsia, and kindred Diseases arising from disorders of the Liver and Digestive Organs, and it is this fact, probably, which has caused the preparation of the American remedies now before the public. Among these remedies are Dr. Hoofland's German Bitters, which has been prominently before the public for years, and which has received the highest testimonials from thousands of our citizens, who have tested its efficiency in diseases of the character referred to. It has also received the highest commendation from Physicians who have used it in their practice, with complete success. The Hoofland's Bitters is a strictly medicinal preparation, and contains no alcohol, rum or whiskey.

Hoofland's German Tonic—Is a combination of all the ingredients of the Bitters, with pure Santa Cruz Rum, Orange, Anise, &c. It is used for the same diseases as the Bitters, in cases where an Alcoholic stimulant is necessary. It is a preparation of rare medicinal value, and most agreeable to the palate. Principal office, 631 Arch Street, Philadelphia, Pa. Sold everywhere by Druggists and others.—*Pittsburg (Pa.) Chronicle.*

NOTICE.

PRINDLE'S AGRICULTURAL STEAMER!

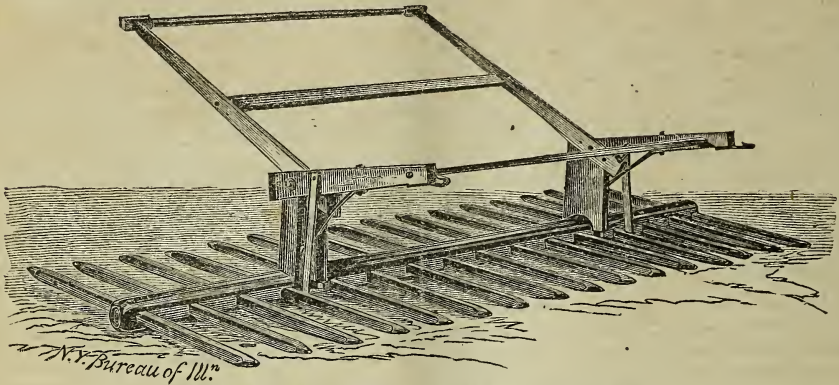
FEEDING COOKED FOOD FOR STOCK.

The manufacturers and Proprietor of Prindle's Agricultural Steamer offer a Premium of \$50 for the first, \$30 for the second, and \$20 for the third best, new and original ESSAYS on "Cooked Food for Stock." They propose to place all manuscripts that may be forwarded to "Office of Practical Farmer, No. 18 N. 13th St. Philadelphia," up to the first day of August next, in the hands of Paschal Morris and Dr. A. L. Elwin, of Philadelphia, and S. E. Tood, Esq., of the N. Y. Times, to determine the merits of the several articles. Those selected by these gentlemen as the best, second best and third best will receive the premiums as above, and the Essays are to be the property of Savery & Co., Philadelphia, and D. R., Prindle, East Bethany, N. Y. All rejected MSS. will be returned to the writers.

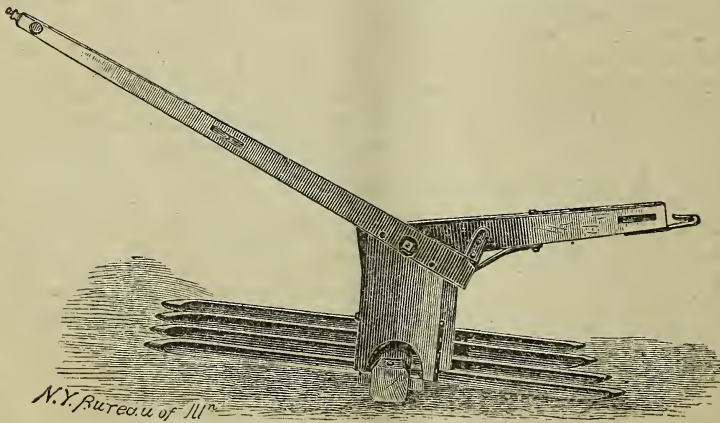
EDMUND WOLF, 31 Light St. Baltimore,
* Agent for the sale of Prindle's Steamer.

THE TIFFIN HORSE RAKE.

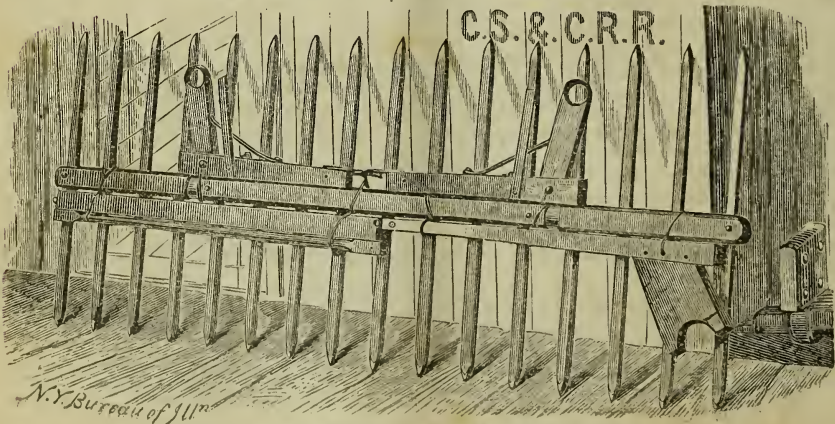
This is a sixteen square hickory tooth Rake—nine feet heads, ash or oak—ash frames—patent adjustable iron-braced knees—frames and head varnished, and teeth oiled. The Tripping arrangement is simple and easily operated, and will not get out of order; and when worn out can be repaired by a farmer or his boy. The following cuts represent this new rake so accurately that a description is unnecessary. They are manufactured by the Tiffin Agricultural Works, Tiffin, Ohio, and for sale by E. Whitman & Sons, Baltimore.



This Cut shows the Tiffin Horse Rake set up ready for use.



This Cut shows the Improved Tripping Arrangement.



This Cut shows the Tiffin Horse Rake Packed for Shipment.

HORSE POWER.

Definition of Horse Power.—Horse power, as a general mechanical term is synonymous with what Whewell has called *Laboring Force*. The work to be done may be performed by various mechanical agents, by men, by horses, by water, by steam, or by wind. In all these cases, laboring force is generated and applied; motion is produced by the continued exertion of pressure. Laboring Force is, then, something more than a mere pressure; it is something useful, something which produces an effect that can be measured.

Unit of Laboring Force.—To determine, therefore the values of laboring force of various kinds, the unit or common measure of laboring force must be established, for which we may take a given weight raised through a given space. One pound raised through one foot, is the most general and convenient measure, and will be adopted in this article as the dynamical unit of laboring force. For the sake of abbreviation we may read it *dynam*, as suggested by Whewell.

The laboring force varies proportionally as the resistance which is to be overcome.

And the laboring force varies proportionally as the space through which the resistance has to be overcome.

Illustrations of Laboring Force.—It is clear, then, that to raise 6 pounds through 10 feet, and to raise 10 pounds through 6 feet, equal amounts of laboring force are required; as in both cases the latter is equal to 6x10 or 60 dynams. It is also the same thing as regards expenditure of force, whether 1,000 be raised through 1 foot, or 1 pound be raised through 1,000 feet. If again, we have weights amounting to 100 pounds at the top of a building 100 feet high, these weights, if deprived of support, have the power of descending through 100 feet, either in one mass or separately. They may, therefore, by the intervention of machinery, be made to raise certain weights through corresponding heights. On a general view, it is obvious that the whole amount of work thus done cannot exceed 100 x 100, or 10,000 dynams; and it may be expended in raising either 10,000 pounds 1 foot high, or 1 pound 10,000 feet high, and so on, the corresponding weight and height being always such that their product is equal to 10,000, the laboring force.

The laboring force exerted by a horse which draws a load, of 6 cwt. over 2 miles level road, is the same with that of a horse which draws 3 cwt. over 3 miles. To prove this, it is not necessary, as a preparatory step, to reduce the hundred weights and miles into pounds and feet, as the exertion of a force of 1 cwt. through the space of one mile, may, if convenient, be chosen for the unit of laboring force.—On this supposition then, the laboring force is in

the first instance represented by 6x2, or 12. In the second instance, it is 4x3, which is likewise 12: showing that the laboring force is the same in both cases. This equality may perhaps be rendered more obvious thus: the effect of 6 cwt. drawn over 2 miles is the same as that of 12 cwt. over 1 mile; for whether 2 horses draw each 6 cwt. over the same mile, or draw these over 2 successive miles, the same amount of effect is evidently produced. By exactly the same reasoning, it is evident the effect of 4 cwt. drawn over 3 miles, is the same as that of 12 cwt. over 1 mile. Both of these effects being therefore equal to 12 cwt. drawn over 1 mile, they must be equal to one another.—*Milling Journal*.

CANADA THISTLE.—A correspondent in the *Canada Farmer* make the following statement: Fallowing and ploughing five times during the season are really the only method of absolutely eradicating this pest. Four ploughings during the season will do a great deal; three are better than two, and that is all that can be said; but five ploughings make sure work, and if conducted in dry hot weather are certain to kill every plant that has attained maturity. There will of course still be seedlings in the ground ready to put forth as soon as a favourable opportunity occurs, and this will last so long as a seed remains which is capable of germination, but five ploughings make sure work.

DIARRHŒA IN FOWLS.—The causes are a scanty supply of grain, which necessitates an excess of green food, or an unwholesome dietary of any description, are the usual causes of this complaint. The treatment is simple: five grains of powdered chalk, the same quantity of rhubarb, and three of cayenne pepper, may be administered; and if relaxation is not speedily checked, a grain of opium and one of powdered ipecacuanha may be given every five or six hours.—*Tegetmeier*.

LOAM DEFINED.—A good loamy soil is one that is neither too sandy nor too clayey—one that when moderately moist will squeeze tight in your hand and retain the traces of your fingers, and yet when dryish will crumble into pieces. If very sandy it will not be cohesive enough. If there is too much clay it will be too close. Sandy loam, such as you will find at most roadsides, is the best for plants.—Turfy loam is loam taken from the green sward of a pasture, or the sides of roads and lanes, taken off thin, from one to two or three inches in thickness, and allowed to decompose for a few months after being piled in a heap. When broken up for use such loam will be found full of decayed vegetable fibre, and hence its use for nourishment and keeping the soil open.—*Cottage Gardener*.

BALTIMORE MARKETS---May 26.

Prepared for the "MARYLAND FARMER" by JOHN MERRYMAN & Co., BALTIMORE.

[Unless when otherwise specified the prices are wholesale.]

BEE-SWAX.—Western 40 cts.; Southern 42 cts.
COFFEE.—Rio 14@18 cts., gold.
COTTON.—Low Middling 28½@28¾ cts.; Middling, 27¾@28½ cts.; Ordinary Upland 26@26½ cts.; Good Ordinary 27½@27¾ cts.

EARTHENWARE.—Common to mixed 40@50 cts. per lb.; fair to good 55@60 cts.; prime live geese, 80 cts.

FISH.—No. 1 Bay mackerel 28@27½; No. 1 Shore 34@26; No. 2 18@19; No. 3 13@14; medium 11.00@12. Labrador herring \$7.00@8.00; gibbed \$5.00@6.00; Codfish \$6.50@7. per 100 lbs.

FLOUR—
Howard Street Super \$ 5.25 @ \$ 6.00
" " Shipping Extra 6.50 @ 7.00
" " High Grades 7.25 @ 8.00
" " Family 8.50 @ 10.00
Western Winter Super 5.25 @ 5.75
" Shipping Extra 6.25 @ 6.50
" Choice Extra 6.75 @ 7.25
" Family 8.00 @ 8.50
Northwestern Super 5.50 @ 6.00
do Extra 6.25 @ 7.25
City Mills Super 5.75 @ 6.25
" Standard Extra 6.75 @ 7.25
" Shipping brands Extra 8.00 @ 8.25
Patapsco, Horicon, Reservoir and Wewerton
Family 00.00 @ 11.25
G. W. Legg's Family 00.00 @ 12.00
Union Mills Acme Family 00.00 @ 12.00
Greenfield Family 00.00 @ 12.00
James S. Welch's Family 00.00 @ 00.00
Baltimore High grade Extra 10.00 @ 10.50
Ashland Family 00.00 @ 11.00
Lingane 00.00 @ 11.25
Rye Flour 6.00 @ 6.25
Corn Meal—City Mills 4.00 @ 4.25
Buckwheat—New York 100 lb 0.00 @ 0.00
" Pennsylvania 0.00 @ 0.00

FERTILIZERS—

The Agent of the Peruvian Government having closed out the entire Stock at this Port, dealers are charging \$80@85 per 2000 lbs., as to quantity.

Turner's Excelsior.....	70	1/2 ton of 2000 lbs.
Turner's Ammo. S. Phos.....	55	1/2 ton "
E. F. Coe's Ammo. S. Phos.....	55	1/2 ton "
Soluble Pacific Guano.....	60	1/2 ton "
Redonda Guano.....	30	1/2 ton "
Flour of Bone.....	60	1/2 ton "
Andrew Coe's Super-phosphate..	60	1/2 ton "
Baugh's Raw Bone S. Phos.....	56	1/2 ton "
Baugh's Chicago Blood Manure..	50	1/2 ton "
" Bone Fertilizer.....	48	1/2 ton "
Grimes' Pat. Improved Fertilizer.	48	1/2 ton "
Zell's Raw Bone Phosphate.....	56	1/2 ton "
Rhodes' do.....	50	1/2 ton "
Mapes' do.....	60	1/2 ton "
Bone Dust.....	45	1/2 ton "
Horne's Bone Dust.....	45	1/2 ton "
Dissolved Bones.....	60	1/2 ton "
Baynes' Fertilizer.....	40	1/2 ton "
" Fine Ground Bone.....	45	1/2 ton "
"A A" Mexican Guano.....	33	1/2 ton "
"A" do.....	30	1/2 ton "
Moro Phillips' Super-Phosphate..	56	1/2 ton "
Berger & Burtz's S. Phos. of Lime	56	1/2 ton "
Whann's Raw Bone Super Phos..	56	1/2 ton "
Md. Fertilizing & Manufacturing }		
Co's Ammoniated Super-Phos- }		
phate.....	.50	1/2 ton
Fine Ground Bone Phosphates }	.30	1/2 ton
Plaster.....	\$2.25	1/2 bbl.
Sulphuric acid, 3 cts. 1/2 lb.—(Carboy \$3.)		
Nitrate of Soda (refined Saltpetre) 6 1/4 cts. per lb in kegs of 100 lbs.		

GRAIN.—Wheat—Pennsylvania fair red \$1.25; Maryland do. low grade \$1.27@1.30; good to prime do. \$1.55@1.65; choice do. \$1.90; prime white \$1.68. Corn—Prime new white 84@87 cts; damp 00@00 cts.; old white 00, yellow 88 @89. Oats—66@68 cts. weight. Rye—\$1.48@1.50.

HAY AND STRAW.—Penna. Timothy, baled, \$20@22; Rye Straw \$20@22 per ton.

MILL FEED.—Brown Stuff 25 cts; Middlings 35@37 cts., per bushel.

MOLASSES—Porto Rico, 50@75 cts; Cuba clayed 48@51 cts; E. Island 45@75 cts. New Orleans 00@00; Muscovado 51@56 cts.

POTATOES.—Market depressed—prices low.

PROVISIONS.—Shoulders 13 cts.; sides 15½@15¾ cts.; clear rib 17½ cts.

SALT.—Fine \$2.70@3.00, per sack; ground alum \$1.90@2.00; Turks Island 50@55 cts., per bushel.

SEED.—Clover \$0.00 Timothy \$0.00; Flax \$2.55.

SUGAR.—Cuba 12@13; Porto Rico 12¼@13¼ Demarara 14@15 cts.

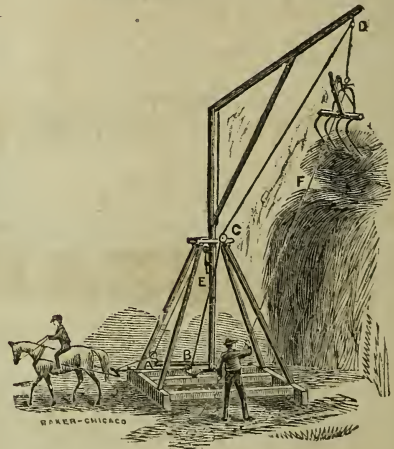
TOBACCO—

Maryland—frosted to common.....	\$ 4.00 @ \$ 5.00
" sound common.....	5.00 @ 6.00
" good do.....	6.00 @ 7.00
" middling.....	7.50 @ 10.00
" good to fine brown.....	11.00 @ 15.00
" fancy.....	17.00 @ 30.00
" upper country.....	7.00 @ 35.00
" ground leaves, new.....	3.00 @ 12.00
Ohio—Inferior to good common.....	4.00 @ 6.00
" brown and greenish.....	7.00 @ 8.00
" good and fine red and spangled.....	00.00 @ 00.00
" medium and fine red.....	9.00 @ 13.00
" common to medium spangled.....	7.00 @ 10.00
" fine spangled.....	12.00 @ 25.00
" fine yellow and fancy.....	00.00 @ 00.00
Kentucky—common to good lugs.....	8.00 @ 10.00
" common to medium leaf.....	11.00 @ 14.00
" good to fine.....	15.00 @ 18.00
" select leaf.....	20.00 @ 25.00

WOOL.—Unwashed, 26@30 cts.; burry 25@27 cts.; tub washed 44@48 cts; pulled 33@38 cts.

WHISKEY.—95@110 cts.

PALMER'S HAY STACKER.



This implement has been much used at the West, where large quantities of hay are deposited out of doors. It first elevates the hay, and then swings it around over the stack, dropping it where desired. It does not drag the hay against the side of the stack, requires no staking down to prevent tipping, and is easily drawn on the sills, as runners, to any part of the farm. T. G. & M. W. Palmer, of Chicago, own this invention, and furnish the smaller parts of the machine, the heavier being easily made on the farms where intended to be used.

HOUSEKEEPERS!
HOUSEKEEPERS!

Men—Women—and Children!
Men—Women—and Children!

READ—READ.

"Cooling to Scalds and Burns,"
"Soothing to all painful wounds, &c."
"Healing to all Sores, Ulcers, &c."

'COSTAR'S' BUCKTHORN SALVE

Is the most extraordinary SALVE ever known. Its power of Soothing and Healing for all Cuts, Burns, Bruises, Sores, Ulcers, Chapped Hands and Skin, for Sore Nipples, for Piles, &c., &c.—is without a parallel. One person says of it, "I would not be without a Box in my House, if it cost \$5 00, or I had to travel all the way to New York for it."—[*N. Y. Evening News*, Sept. 5.]

All Druggists in Baltimore, Md., and Delaware sell it.

THE BISHOP PILL!
THE BISHOP PILL!
THE BISHOP PILL!

Not 'Brandreth's'—not 'Ayer's'—not 'Wright's,'

BUT

"COSTAR'S" BISHOP PILL,

"Which is bound to take the place of all others; a purely vegetable Pill (sugar coated), and of extraordinary efficacy for Costiveness, Indigestion, Dyspepsia, Headaches, Nervous Debility, Liver Complaint, &c,"

[*Medical Journal*, Sept. 8.]

Positively the best Pill in the World.

Thousands of Boxes now used.

All Druggists in BALTIMORE sell them.

"COSTAR'S"

Standard Preparations

ARE HIS

BEAUTIFIER!

THE

BITTER-SWEET AND ORANGE BLOSSOMS.

One Bottle, \$1.00—Three for \$2.00.

HIS

BUCKTHORN SALVE!

HIS

"Costar's" Rat, Roach, &c., Exterminators.

"Costar's" Bed Bug Exterminators.

"Costar's" (only pure) Insect Powder.

"Only Infallible Remedies known."

"18 years established in New York."

"2,000 Boxes and Flasks manufactured daily."

"!!! Beware!!! of spurious imitations."

"All Druggists in Baltimore sell them."

Address "COSTAR," 10 Crosby St, N. Y.

Or, JOHN F. HENRY (Successor to)

Demas Barnes & Co., 21 Park Row, N. Y.

Or THOMSEN & BLOCK, Wholesale Agents, Baltimore, Md.

Sold throughout Maryland, Del., and Va., by all best Druggists. ja-ly

Prindle's Agricultural Steamer,

FOR

Fruit Growers, Stock Feeders,
Dairymen, &c.



This Steamer has now been in use a number of years, is perfectly safe and a most complete invention for cooking food for Stock, Scalding Hogs, and for general culinary purposes.



Mr. S. L. Hyatt of Huntingdon, Pa., writes, "I use my Steamer chiefly in canning of fruit, it answers the purpose to my fullest expectations, * * * and would not be without one at double its cost."

Messrs. Frank L. Morling and Chas. W. Beatty of this City, have each a Prindle Steamer in use "since last Fall," of which they speak in the highest terms as to their great value for Cooking, Steaming and Boiling purposes, and say they would not be without them.

The Steamer is for sale by

EDMUND WOLF, 31 Light Street,

je-4t

Baltimore, Md.

BONE DUST.

The subscriber has just erected at his farm, near the city, the most improved machinery for making

BONE DUST,

And is now ready to fill orders for any quantity, which will be delivered at the shortest notice. The Bone Dust will be finer than any heretofore made by him, enabling the farmer or planter to sow it with the Drill.

Mr. SAMUEL SANDS,

Well known to the farmers and planters of the United States as the former editor of the *American Farmer* and *Rural Register*, will have charge of his office, No. 63 S. GAY STREET, near Pratt, and will be happy to receive the visits or orders of his old friends.

JOSHUA HORNER,

OFFICE, 63 SOUTH GAY STREET, near Pratt,

Or Cor. Chew and Stirling Sts.

aug-6t

BALTIMORE, MD.

Book and Job Printing of every description executed at this office,

BARGAINS IN Agricultural Implements.

The subscriber having no use for the following MACHINERY, &c., will sell them at the following reduced prices, viz:

1 one-horse Endless Chain Horse Power, about good as new, price \$80.

1 20-inch Threshing Machine, good as new, price \$50.

1 60-foot Belt, good as new, price \$10.

1 Stetson's Patent Mowing Machine, in good working order, price \$75.

1 Spiral (Hand) Corn Sheller, in good working order, price \$10.

1 Bean, Corn, Pea and Beet Seed Horse Drill, about good as new, price \$15.

1 Light 3-horse Wiley Plow, in fair order, price \$8.

All made by R. Sinclair & Co.

Also, one BAY HORSE, 7½ years old, 15 hands high; warranted sound; best suited for light harness. Will make his mile in 5 minutes. Price \$200.

Address

R. SINCLAIR,

Care of J. W. ANDERSON,

1t

North Gay Street, Baltimore, Md.

\$1000 to \$2000 PER YEAR SUR.

And no risk. Agents wanted, on commission or salary, in every part of the U. S. and Canada, to sell our celebrated *Patent Electric Wire Clothes Lines*, warranted to last a life-time and never rust. For full particulars address the *AMERICAN WIRE CO.*, 75 William St., N. Y., or 16 Dearborn st., Chicago. "P. S.—If every household should have one."—N. Y. Tribune. "All that purport to be; never wear out."—N. Y. Independent. "They give entire satisfaction."—N. Y. Christian Advocate.

ALDERNEY CATTLE

AT PUBLIC SALE.



The subscriber will offer at Public Sale at his residence, at *HADDONFIELD, NEW JERSEY*, six miles from Philadelphia, on the 24th day of JUNE, 1869, about 50 HEAD of Choice, Pure Bred

ALDERNEYS.

Among them are many fine Cows, some excellent stock Bulls and promising Yearlings of both sexes. This herd has been carefully selected from the best sources, and judiciously bred under my personal supervision.

Gentlemen desiring to obtain animals of this popular breed are invited to attend, as the sale will be peremptory.

At the same time will be sold four highly bred young HORSES. Sale to commence at 12 o'clock.

Catalogues on day of sale.

Trains leave Philadelphia via Camden and Atlantic Railroad at 8, 9 and 10.15. Returning, leave Haddonfield at 3.15, 4.15 and 6.45 o'clock.

C. H. SHINN,

Haddonfield, N. J.


1t

TO FARMERS!

DISSOLVED BONES.

(SUPERPHOSPHATE,)

Of own manufacture, containing 35 per cent. of Soluble Phosphate of Lime. For Top-Dressing Wheat or Grass lands, or hill application to Corn, it is peculiarly adapted. In fine dry powder for sowing or drilling in with Grain.

 PRICE \$56 PER TON.

J. J. TURNER & CO.,

42 PRATT STREET,

BALTIMORE.

je-tf

BELMONT STOCK FARM.



I am breeding thorough-bred Horses, the Imported Percheron Norman Horses, and the Black Hawk Branch of the Morgan Stock, and have Geldings of the latter for sale.

My cattle are pure bred SHORT HORNS, and have them of all ages for sale.



Also Albemarle Improved HOGS, (a cross of Chester White and Kentucky Woburn) better suited to rough fare, and the Chester White's the best, when well cared for.

S. W. FICKLIN,
Near Charlottesville, Va.

je-tf

For Sale Cheap.

1 Junior Combined BUCKEYE REAPER AND MOWER, used but one season, and as good as new. Sold for want of use.

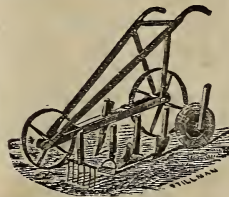
Address, or apply at this office, to
1c* O. W. ROWLAND.

THE VICTOR GRAIN DRILL

Has no equal. Proven by **three seasons trial**. It has force feed, high wheels, light draft; no weight on horses' necks, and the best made in the market.

Will sow lime or plaster, if wanted, with grain.
Send for full description. Responsible Agents wanted.—
BLYMYER, DAY & CO.,
Mansfield, Ohio.

1c



Crawford's Garden CULTIVATOR.

Hand machine for all kinds of Garden Cultivation. Warranted to do the work of 4 men. Send for circulars.
BLYMYER, NORTON & Co.,
Cincinnati, O.

Blymyer, Day & Co. Mansfield, O.; Blymyer, Fearing & Co. Chicago, Ill. It

ANTED—AGENTS—\$75 to \$200 per month, everywhere, male and female, to introduce the GENUINE IMPROVED COMMON SENSE FAMILY SEWING MACHINE.

This Machine will stitch, hem, fell, tuck, quilt, cord, bind, braid, and embroider in a most superior manner. Price only \$18. Fully warranted for five years. We will pay \$1000 for any machine that will sew a stronger, more beautiful, or more elastic seam than ours. It makes the "Elastic Lock Stitch." Every second stitch can be cut, and still the cloth cannot be pulled apart without tearing it. We pay Agents from \$75 to \$200 per month and expenses, or a commission from which twice that amount can be made. Address SECOMB & Co. PITTSBURG, PA., BOSTON, MASS., or ST. LOUIS, MO.

CAUTION.—Do not be imposed upon by other parties palming off worthless cast iron machines, under the same name or otherwise. Ours is the only genuine and really practical cheap machine manufactured. je-3

SORGO HAND-BOOK.

The Tenth Annual Sorgo Hand-Book,

Giving the most reliable information on Manufacturing Sorghum Sirup, the result of 11 years' personal experience, with the celebrated Standard Sugar Machinery the Cook Evaporator and Victor Cane Mill—sent free to all applicants.

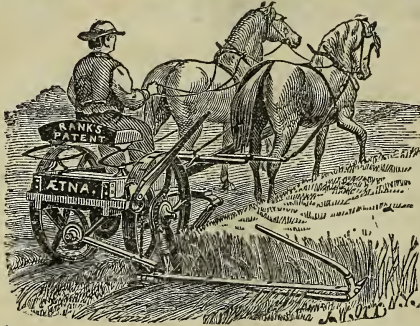
BLYMYER, NORTON & CO., Cincinnati, O.
BLYMYER, Day & Co. Mansfield, O.; BLYMYER, FEARING & Co., Chicago, Ill. It

AETNA MOWER AND REAPER.

Champion Harvester of the Age!

MANUFACTURED

BY THE



Aetna Manufacturing Co.
SALEM, OHIO.

Highest Premium again awarded the AETNA by Maryland Institute, November, 1868.

A. G. MOTT, Genl. Agent for Md. and the South,
40 ENSOR ST., near Belair Market, Baltimore, Md.

Manufacturer and Dealer in Agricultural Implements, Seeds, &c.

— A CALL IS SOLICITED.

je-2t

THOS. NORRIS & SON,

141 PRATT STREET, near Light, Baltimore,

SOLE AGENTS FOR

Woods' Self-Raking Reaper.

PRICES—Self-Raking Reaper.....\$165 00

“ “ with new Mowing Attachment... 205 00

New Joint Bar Mower, 4 foot 3 inch cut..... 125 00

Delivered on Cars or Vessel in Baltimore.

These Machines need no commendation from us, being universally known as best, and positively inferior to none, in use the world over. *See* New descriptive circulars and price lists furnished upon application. Order early. More than fifty were disappointed last year, in this State alone, who ordered late.

WESTINGHOUSE THRESHERS and CLEANERS—Warranted to suit purchasers—are sold by us as heretofore. *See* Circulars and price lists sent upon application. These machines have been long and favorably known as most desirable in use.

BICKFORD & HUFFMAN'S DRILL at manufacturers' prices. Horse Powers of various kinds, warranted to give the best satisfaction. Self-Discharging Wheel Rakes, Revolving Hay Rakes, Gleaners, Hand Grain and Hay Rakes, Grain Cradles, Grass Scythes and Snaths. **WHEAT FANS**—Locomotive, Rockaway and Van Wickle—these are known to be the very best in the whole country—with all other machines and tools needed in the Harvest Field.

Plows, Harrows, Cultivators, of our own make, of every description; Routt's celebrated Double Shovel Plow, Ohio Iron Double Shovel Plow, and every other Implement and Tool needed on the farm; Corn Shellers, Cider Mills, Washing Machines, Clothes Wringers, &c., &c.

See Fresh and Genuine GARDEN and FIELD SEEDS, Fertilizers, &c.

THOMAS NORRIS & SON,

141 PRATT STREET, BALTIMORE, MD.

TO TOBACCO PLANTERS!!

—:O:—
“EXCELSIOR”

NO. 1 PERUVIAN GUANO AND SOLUBLE PHOSPHATES.

Ten years' experience in the growth of Tobacco in Maryland and Virginia has demonstrated beyond doubt that “EXCELSIOR” has no competitor in the growth of that staple. It is the unanimous opinion of the Tobacco planters of Maryland “that from the application of ‘Excelsior’ the crop is heavier and of finer quality, cures earlier and better, and is not so liable to suffer from drought as from Peruvian Guano.” We refer to every Tobacco planter in Maryland.

Uniformity of quality guaranteed by the manufacturers.

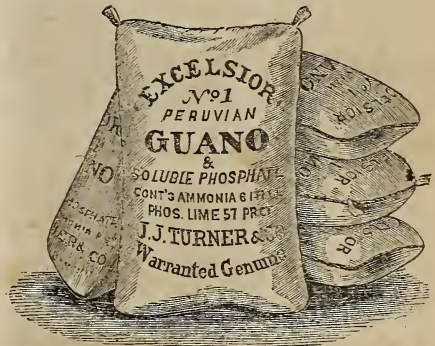
PRICE SEVENTY DOLLARS PER TON.

J. J. TURNER & CO.

NO. 42 PRATT STREET, BALTIMORE.

CAUTION!

The popularity of “EXCELSIOR” as the only reliable substitute for Peruvian Guano, has induced unscrupulous parties in this and other cities to use the name “EXCELSIOR” to sell their worthless compounds. Every Bag of Genuine “EXCELSIOR” has our name on it in RED LETTERS. All others are counterfeits. J. J. TURNER & CO.



To Corn and Oat Growers!

—:O:—
AMMONIATED BONE SUPER PHOSPHATE,

Of own manufacture, containing Ammonia 3 per cent. and Soluble Phosphate of Lime 25 per cent. The best Corn, Oat and general spring crop grower offered; dry and in good order. Uniformity of quality guaranteed.

Packed in Bags and Barrels.

Price \$55 Per Ton.

J. J. TURNER & CO.,

42 Pratt Street, Baltimore, Md.

LAND AGENCY!

AUBREY H. JONES,
LAND AGENT

Tappahannock, Essex Co., Va.

Has for sale and lease a large number of very VALUABLE FARMS in tide water Virginia, from the Potomac to the James River, situated chiefly on the water, and offered at exceedingly low prices, and respectfully invites capitalists and those in search of desirable homes to inspect these lands. Letters promptly answered and catalogues furnished upon application. je-7t

WANTED-AGENTS-TO SELL THE AMERICAN KNITTING MACHINE. Price \$25. The simplest, cheapest and best Knitting Machine ever invented. Will knit 20,000 stitches per minute. Liberal inducements to Agents. Address AMERICAN KNITTING MACHINE CO., Boston, Mass., or St. Louis, Mo. je-3

Notice to Farmers, Dairymen and Horsemen!

BREINIG, FRONFIELD & CO'S

VEGETABLE CATTLE POWDER.

FIRST INTRODUCED IN 1848.

This preparation contains the latest and most approved remedies for all diseases to which Horses, Cattle and Swine are incident. Either as a preventive or as a cure in the early stages of the dreaded disease of Pleuro-Pneumonia or Rinderpest, now making fearful inroads among our Cattle. This POWDER has already achieved reasonable reputation. It is compounded on strictly chemical principles; contains the elements to form healthy blood and generate animal heat, and is warranted to make an increase of at least 25 per cent. in the animal product, either as fat or as milk and butter, upon the same amount of food.

Prepared by

FRED. A. MILLER, Sole Agent,
No. 128 North 4th Street, Philadelphia, Pa.

N. B.—Do not fail to send for a pamphlet giving full particulars. feb-6t

Pat'd Water-Proof Paper
Roofing, Siding, Ceiling,
Carpeting, Water Pipes,
Eave Gutters, &c. Address
O. J. FAY & SONS, Camden, New Jersey.

mar-ly*

SMALL FRUIT INSTRUCTOR

32 PAGES of plain directions for planting and cultivating, for family as well as market garden, and marketing all Small Fruits. Written from 20 years experience and gives all the information of the larger and more costly works, so as to put new beginners on equal footing with old fruit growers. We have hundreds of testimonials, of which the following from Rev. H. W. Beecher is a sample: "Your directions for growing Strawberries and Raspberries are the best I have ever seen." Price 10 cents. Wholesale and retail lists sent by mail free on application. Address, PURDY & JOHNSTON, Palmyra, N. Y., or PURDY & HANCE, South Bend, Ind. jan-tf

"COTSWOLD BUCKS."



I have for sale fine BUCKS bred with great care from stock obtained from the celebrated flock of Burdette Loomis, Esq., of Connecticut, also a few grade Ewes Address

may-6t

C. J. B. MITCHELL,
Queenstown, Md.

NOTICE!

Batesville, on the Columbia and Augusta Railroad, in South Carolina, is in want of one or more first-rate BLACKSMITHS and WHEEL-RIGHTS.

For particulars, address

A. D. BATES,
Leesville, S. C.

ap-3t

DOVEGETABLES THINK! A curious and interesting inquiry; Instructions in hunting and trapping, illustrated; Near-sightedness, cause and cure; Choice of business; How to become an author; How to train animals, including many curious, amusing and surprising tricks, illustrated; Magnets and magnetism; "Swiss honey"; Rich men of the world, and how they gained their wealth; Exposures of humbugs, quacks and swindles, by the author of "Rogues and Rogueries"; Trade secrets and money making manufactures; Hints for the household; Family recipes; Games, puzzles, magic and amusements for the young; and choice miscellany for all, in

HANEY'S JOURNAL.

Enlarged with new volume, giving over 1,500 square inches of interesting and instructive reading matter, attractive illustrations, &c., each month for ONLY FIFTY CENTS A YEAR. ~~For~~ This is no advertising sheet, trashy catch-penny or "axe grinder"—our aim is to give a first rate, carefully edited, and well printed and illustrated paper, at a very reasonable price. The scarcely perceptible profit on each subscriber pays us on our large circulation. ~~For~~ Now is the time to subscribe. Specimens 7 cents by mail, or 5 cents of new dealers, none free. Try it a year—it will pay you. JESSE HANEY & CO., 119 Nassau street, New York. feb-tf

IRON AND WIRE FENCES.

Iron Ox Hurdle Fence, Iron Sheep Hurdle Fence, Wire Webbing for Sheep and Poultry Yards, Iron Farm Gates, Guards for Stable Divisions, Store Fronts, Factories, &c., Tree Guards, ORNAMENTAL WIRE WORK for Porches, Green Houses, &c.; WIRE RAILING for Cottage, Garden and Cemetery enclosures; Mosquito Netting and every variety of WIRE WORK. ~~For~~ Every information furnished by manufacturers.

M. WALKER & SONS,
feb-ly No. 11 N. 6th street, Philadelphia, Pa.

EGGS FOR HATCHING.

From Crevecoeur, Houdan, Black Java, Buff Cochins, White Face Black Spanish, Brahmas, Silver Spangled Hamburgs, Dominiques, Earl Derby Games, Cuban Games. Rouen, Aylesbury, Cayuga and Muscovy Ducks.

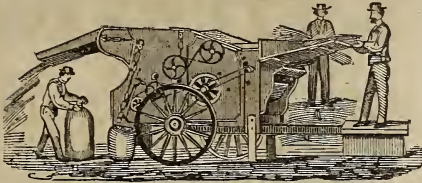
My breeding stock are second to none in the country.

Send stamp for descriptive circular and life portraits.

aug-ly

C. P. NETTLETON,
Birmingham, Connecticut.

GEISER'S PATENT SELF-REGULATING Grain Separator, Cleaner & Bagger.



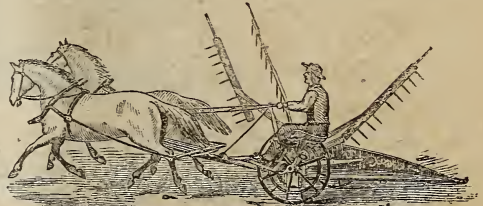
The capacity of this machine is from 200 to 300 bushels of wheat per day, and double that amount of oats, with 5 or 6 hands and as many horses. The capacity of No. 1 large machine, 500 or 600 bushels of wheat per day, and double that amount of oats. There is also a great saving of grain, in straw and chaff, over the common way of threshing and cleaning, and also over other Separators and Cleaners. The machine is conveniently arranged for hauling and threshing, being permanently

fixed on two wheels—and prepares the grain clean for market at one operation. This machine can be run with either lever or railway power.

JOHNSTON SELF-RAKING REAPER,

For the past four years shows a merit that has no parallel in the history of Harvesters in this or any other Country.

The inventing of this Reaper just at the time when mechanics and farmers were settling down in the belief that they had already discovered the right and only practical method for securing grain, is one of those phenomena, or strides made in the inventive art that now and then occurs within a lifetime. Former efforts have been numerous and their results complicated, while in this we have the most simple structure imaginable, and which thus far proves susceptible of improvement only in form and strength; the universal acknowledgement has been, "The Principle is Perfect."



The Johnston Self-Raking Reaper has an Adjustable Cut—i. e., if you are reaping standing grain, and all at once come to a lodged spot—by moving a lever at your side the cutters are lowered to gather it up; and this is raised and lowered in a moment, while the Machine is working.

THE HUBBARD LIGHT MOWER.

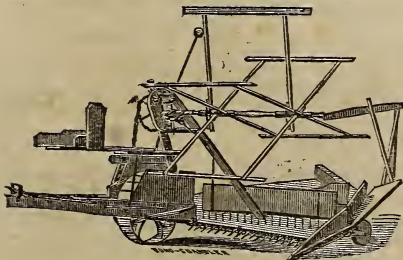


We make this assertion without fear of successful contradiction, and can verify the statement by thousands of references.

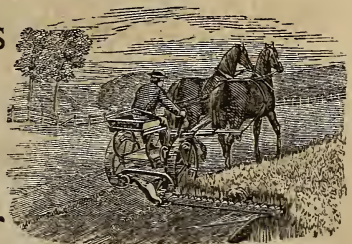
In presenting the Hubbard Light Mower to the Farmer for 1869, we do not propose to discuss at length its merits. It is so well and favorably known, that it needs no argument to convince any unprejudiced man, that it is the best Mower now before the public.

Years of labor have been bestowed upon the Hubbard Machine to make it as perfect as possible, and each year's improvements have added to its merits, until now it stands unrivalled as the best and the most perfect Mower in the world.

LINTON & LAMOTT, Baltimore, Md.



M'CORMICK'S REAPER AND MOWER.



THE RELIABLE—By which we designate the well known Self-Raking Reaper, (as represented above,) which has won for itself a world-wide notoriety as the machine which abolished the old style of raking by hand. It is a one-wheeled machine, with serrated sickle, and while built mainly with a view to reaping (in which it has no competitor for amount or quality of work it can accomplish per day,) it can also be very successfully used as a Mower. It is an indispensable machine for those who have more than about sixty acres of grain to harvest.

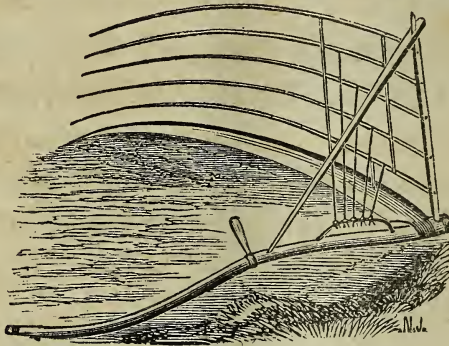
THE M'CORMICK PRIZE MOWER—A two-wheeled, four foot cut Mower, with double-jointed Cutter-Bar, lifting and tilting levers, &c.; a superb Mower in all varieties and conditions of grass and ground.

For further information, pamphlets, &c., address

may-4t

LINTON & LAMOTT, 151 N. High St., Baltimore.

GRANT'S PATENT GRAIN CRADLES.



E. Whitman & Sons, Sole Agents for Baltimore and Southern States.

There probably has never been an implement of any kind used by the farmer that has given such general satisfaction as GRANT'S PATENT GRAIN CRADLES. The very large demand for them from all parts of the world, where grain is raised, makes it necessary in order to secure a supply to send orders in early.

SUPERIOR GRASS AND GRAIN SCYTHES.

Manufactured Expressly for E. Whitman & Sons.

English Pattern Grass Scythes,	German Steel Bush Scythes,
Cast Steel Waldron Pattern Grass Scythes,	Cast Steel Grain Scythes, (English Pattern,)
German Steel Waldron Pattern Grass Scythes	Waldron Pattern Grain Scythes,
Silver Steel New York Pattern Grass Scythes	Dunn's Clipper Grass Scythes (every one war-
Cast Steel Bush Scythes,	ranted.)


The latter is a new article, and we can recommend them as being something very superior. They are probably the most beautifully finished Scythe in the country, and come from the factory sharpened and already for use.

SCYTHE SNEATHS.

Manufactured Expressly for E. Whitman & Sons.

No. 3, Heavy, Ring Fastening.	No. 2, Extra Finished Sneath, Patent Fas-
No. 2, Extra Heavy Ring Fastening.	tening.
No. 1, Extra Heavy Bush Sneath.	

Scythe Stones and Rifles.—Trumbull celebrated Diamond Grit, packed in one fourth gross boxes. We also have other varieties of Stones, which we can furnish at the lowest market prices: Common Rifles, Improved Double Coat Rifles, Treble Coat Rifles. **HAND HAY RAKES, &c., &c.**

 Dealers supplied on liberal terms.

E. WHITMAN & SONS,

Nos. 22 and 24 SOUTH CALVERT STREET,

Baltimore, Md.

THE MARYLAND FARMER.

MORO PHILLIPS'

GENUINE IMPROVED

SUPER-PHOSPHATE OF LIME

STANDARD GUARANTEED.

For sale at the Manufacturer's Depots,

No. 27 Front Street, Philadelphia,

AND 95 SOUTH STREET, BALTIMORE,

And by Dealers in general throughout the country.

The SOMBRERO GUANO of which MORO PHILLIPS' PHOSPHATE is and always has been manufactured, (and of which he has sole control for the United States,) contains fifty per cent. more Bone Phosphate than Raw Bone, therefore it is more durable. The addition of Ammonia gives it greater fertilizing value.

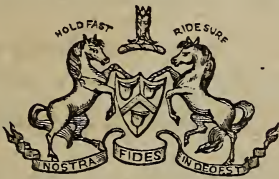
Over eight years' experience has proved to the farmer that it makes a heavier grain than even stable manure, and is not only active, but lasting.

Price \$56 Per Ton---2,000 Pounds. Discount to Dealers.

MORO PHILLIPS,

Sole Proprietor and Manufacturer.

mar-ly



SAMUEL HUNT,

Manufacturer and dealer in

Saddlery, Harness, Trunks,

TRAVELING BAGS, SATCHELS, &c.

No. 202 BALTIMORE STREET,

Between Charles and St. Paul Streets,

BALTIMORE, MD.

Woolen and Linen Horse Covers, Fly Nets, Buffalo Robes, Whips, Spurs, Bridles, Collars, &c.

Orders sent direct will be filled at same price as if bought in person.

sep-ly

LEACHED ASHES!

LEACHED ASHES!!

5000 to 10,000 Bushels Leached Ashes, for sale by JAMES WEBB,

Soap and Candle Factory,
Corner Chew and Ensor Streets,
Baltimore, Md.

mar-tf

SAWS.

MARYLAND SAW MANUFACTORY.

HENRY C. BROWN & CO.,

Manufacturers of every Description of

CAST STEEL SAWS,

ON THE MOST APPROVED PRINCIPLE.

UHLER'S ALLEY, 1 door from Charles,

Between Lombard and Pratt Streets.

And 85 N. FRONT STREET,

BALTIMORE.

Circular, Mill, Cross Cut, Pit, Hand, and Wood Saws. Saws of every description repaired. An assortment of Saws of superior quality and of every description always on hand. Orders executed with punctuality and dispatch.

je-ly

WM. H. NEWTON,
Att'y at Law.

WASHINGTON R. HANSON.

Maryland and Virginia Farms and Baltimore City Property

FOR SALE BY

WM. H. NEWTON & CO.,

General Land Agents,

23 LEXINGTON ST., BALTIMORE.

BERGER & BUTZ'S
Excelsior Superphosphate of Lime



This valuable Fertilizer took the First Premium at the Agricultural Fairs held at Danville and Staunton, Virginia, in October, 1868, and may be relied upon as the best and cheapest fertilizer for Cotton, Tobacco, Corn, Oats, Wheat, Vegetables, &c.

R. J. RUTH & CO., General Agents,
jan-1y 16 Bowly's Wharf, Baltimore, Md.

BOWER'S
COMPLETE MANURE,

MANUFACTURED BY

HENRY BOWER, Chemist,
PHILADELPHIA.

MADE FROM

Super-Phosphate of Lime, Ammonia and Potash.

WARRANTED FREE FROM ADULTERATION.

This Manure contains all the elements to produce large crops of all kinds, and is highly recommended by all who used it, also by distinguished chemists who have, by analysis, tested its qualities.

Packed in Bags of 200 lbs. each.

DIXON, SHARPLESS & CO.,
AGENTS,

39 South Water & 40 South Delaware Avenue,
PHILADELPHIA.

FOR SALE BY

WILLIAM REYNOLDS,
79 SOUTH STREET, BALTIMORE, MD.

And by dealers generally throughout the country.
For information, address Henry Bower, Philadelphia.
feb-1y

BONE

Guaranteed Perfectly Pure.

R. J. RUTH & CO.

mar-1y 16 Bowly's Wharf, Baltimore, Md.

GEO. P. ROWELL & CO.

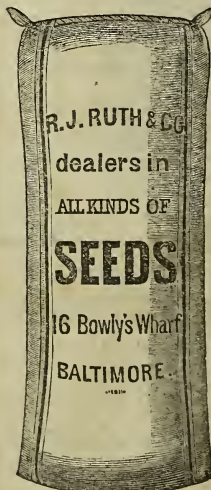
Advertising Agents

No. 40 Park Row, New York.

Messrs. GEO. P. ROWELL & CO. are Agents for

THE MARYLAND FARMER,

and the most influential and largest circulating Newspapers in the United States and Canadas.—
They are authorized to contract for us at our lowest prices.
nov-1f



CLOVER,

TIMOTHY,

KENTUCKY

Blue Grass,

Red Top

And all other

SEEDS.

Our SEEDS are new, free from weeds, and may be relied upon as the best in the market.

R. J. RUTH & CO.

COMMISSION MERCHANTS,

jan-1y 16 Bowly's Wharf, Balto., Md.

E. WHITMAN & SONS,

22 and 24 S. Calvert Street,

BALTIMORE, MD.



AGENTS

FOR

THE



“EXCELSIOR”

Self-Raking or Dropping

REAPER and MOWER

MANUFACTURED BY THE

J. F. Seiberling Company,

AKRON, OHIO.

The Excelsior is no longer an untried experiment; but, on the contrary, it is a successful reality, having now been before the public eight harvests, and having passed triumphantly through the severest tests on all kinds of land; up hill and down hill; through mud and mire; over stones, stumps and ditches; wet and dry; cutting through tangled and lodged grain and grass, and still doing its work equally well in all situations and conditions, until it is now acknowledged by all, both friends and adversaries, to have more good points than any other Reaper and Mower now known, and well worthy of its exalted name—EXCELSIOR—as it does in reality excel all others; being light, yet strong and durable; simple, without the least complication; the driver performing the whole—the driving and dropping off the grain—with as much ease as driving alone; throwing or dropping off the grain at pleasure, by a treadle under his foot, which delivers the grain in better condition to bind than a hand-raker can possibly rake it off, and when dropped, it lets the grain lay on the stubble just as it laid on the slatted platform of the machine.

PRICES:

Large Combined Machine,	\$185 00
Junior “ “	170 00
Large Mower,	140 00
Junior “ “	125 00

Freight from Factory added to the above prices.

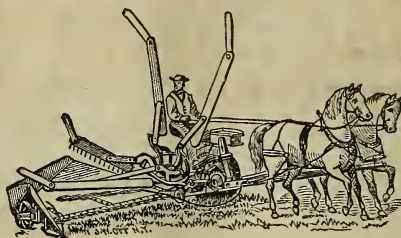
We would advise all who may desire to procure one of these most excellent machines to make early application, as the demand has been largely in excess of the supply for several past seasons.

Descriptive catalogues and circulars sent on application. Address

E. WHITMAN & SONS,

22 and 24 S. Calvert Street, Baltimore, Md.

THE KIRBY HARVESTER.



The Best Mower.

The Best Reaper.

The Best Self Rake.

The Best Combined Machine.

50,000 NOW IN USE!

6,000 SOLD IN 1868!

IT MOWS.

IT RAKES.

IT REAPS.

PRICES IN BALTIMORE:

Hand-Raking Reaper,	-	-	-	-	-	\$150
Self-Raking Reaper, -	-	-	-	-	-	190

WARRANTY.—That they are well built, of good material, and capable of cutting, with one span of horses, an acre of grass or grain per hour. The purchaser to have the privilege of cutting two acres of grass or grain as a trial of the machine. If it should not work well, he shall give notice to the agent, and allow him time to send a person to put it in order. If it cannot then be made to work satisfactorily, it will be taken back and considered no sale.

The Grand Gold Medal was awarded to the KIRBY HARVESTER at the great National Trial at Auburn, New York, in July, 1866; also a Grand Gold Medal was awarded to it by the St. Louis Agricultural and Mechanical Association, at their Fair at St. Louis in 1866; and two highest premiums (Silver Medals) at the Minnesota State Trial at Rochester, 1867.

Send for circular to

F. L. MOORE, Genl. Agent,

Nos. 22 and 24 SOUTH CALVERT STREET, Baltimore, Md.

Or to E. WHITMAN & SONS.

A full stock of Extras will be found for the KIRBY from 1857 to 1869 at Messrs. E. WHITMAN & SONS, Baltimore. may-tf

THE GREAT FERTILIZER
WHANN'S
RAW BONE
SUPER PHOSPHATE
 STANDARD GUARANTEED
200 lbs.
 MANUFACTURED BY
WALTON, WHANN & CO.
WILMINGTON, DEL.
DEPOTS:
 203 WEST FRONT ST. WILMINGTON.
 22 SOUTH WHARVES, PHILAD'A.
 59½ S. CHARLES STREET, BALTIMORE.
 13 FAIRFAX ST. ALEXANDRIA.

PROMPT
ACTIVE
RELIABLE
A THOROUGH RENOVATOR
 OF
EXHAUSTED SOILS
SEND FOR PAMPHLET
WALTON WHANN & CO.
WILMINGTON
DELAWARE.

Price in Baltimore of Whann's Raw Bone Super-Phosphate \$56 per ton.

Baltimore office, 59½ SOUTH CHARLES STREET.

ap-6t

E. G. EDWARDS, Agent.

FOUTZ'S

CELEBRATED

Horse and Cattle Powders.



This preparation, long and favorably known, will thoroughly re-invigorate broken down and low-spirited horses, by strengthening and cleansing the stomach and intestines.

It is a sure preventive of all diseases incident to this animal, such as LUNG FEVER, GLANDERS, YELLOW FEVER, HEAVES, COUGHS, DIS- TEMPER, FEVERS, FOUNDER, LOSS OF APPETITE AND VITAL ENERGY, &c. Its use improves the wind, increases the appetite—gives a smooth and glossy skin—and transforms the miserable skeleton into a fine-looking and spirited horse.



To keepers of Cows this preparation is invaluable. It is a sure preventive against Rinderpest, Hollow Horn, etc. It has been proven by actual experiment to increase the quantity of milk and cream twenty per cent. and make the butter firm and sweet. In fattening cattle, it gives them an appetite, loosens their hide, and makes them thrive much faster.

In all diseases of Swine, such as Coughs, Ulcers in the Lungs, Liver, &c., this article acts as a specific. By putting from one-half a paper to a paper in a barrel of swill the above diseases will be eradicated or entirely prevented. If given in time, a certain preventive and cure for the Hog Cholera.



DAVID E. FOUTZ, Proprietor,
BALTIMORE, Md.

For sale by Druggists and Storekeepers throughout the United States, Canadas and South America.

FOUTZ'S MIXTURE,
The Great External Remedy,
For Man and Beast.
IT WILL CURE RHEUMATISM

The reputation of this preparation is so well established, that little need be said in this connection



On MAN it has never failed to cure PAINFUL NERVOUS AFFECTIONS, CONTRACTING MUSCLES, STIFFNESS AND PAINS IN THE JOINTS, STITCHES IN THE SIDE or Back, SPRAINS, BRUISES, BURNS, SWELLINGS, CORNS and FROSTED FEET.

Person affected with Rheumatism can be effectually and permanently cured by using this wonderful preparation; it penetrates to the nerve and bone immediately on being applied.



On HORSES it will cure SCRATCHES, SWEENEY POLL-EVIL, FISTULA, OLD RUNNING SORES, SADDLE or COLLAR GALLS, SPRAINED JOINTS, STIFFNESS OF THE STIFLES, &c. It will prevent HOLLOW-HORN and WEAK BACK IN

MILCH COWS.

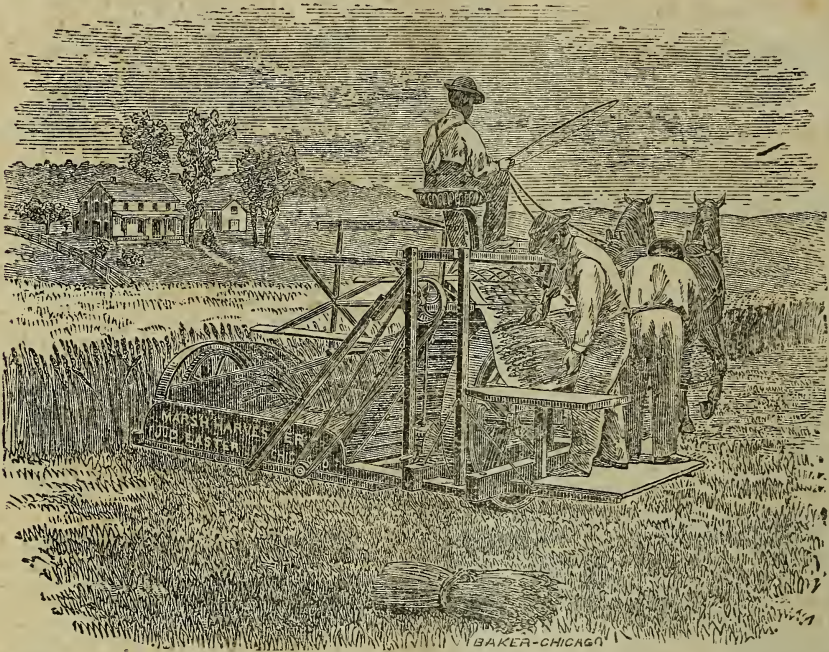
I have met with great success in bringing my Mixture within the reach of the Public. I am daily in receipt of letters from Physicians, Druggists, Merchants and Farmers, testifying to its curative powers.

DAVID E. FOUTZ, Sole Proprietor,

BALTIMORE, Md.

feb-ly

THE MARSH HARVESTER!



SAVES LABOR! SAVES MONEY! SAVES GRAIN!

POINT FIRST.—It saves half the cost of harvesting, two men doing the work of four.

POINT SECOND.—It saves all the grain, not a straw touches the ground till bound.

POINT THIRD.—It is a simple machine, has only half as much gearing as an ordinary reaper.

POINT FOURTH.—It is light running. You probably will not believe this until you see it run. You certainly will then. The reason it runs so light, is, the wheels are large, there is so little gearing, and the weight is evenly divided on the main wheel.

POINT FIFTH.—There is no side draft.

POINT SIXTH.—You can turn it round as easy as a cart or sulky. Try it and see if this is not true.

POINT SEVENTH.—It is the best machine for lodged and tangled grain, because the grain is straightened somewhat in elevating to the concave, and the binders can get it in much better shape for binding, than they could if thrown on the ground.

Illustration: A machine in working order now on exhibition at this office.

A correspondent at Newark, Delaware, writes us as follows:

"I see by your advertisement that you are agent for the Marsh Harvester—would say that I have been using one of them for two years past. I consider them to be the best machine yet introduced to save labor and expense in the harvest field. I have two men that can bind and deliver the sheaves in winrows as they pass along, so there is nothing to do but to set them up in shocks. There is but very little raking after this machine, and a smoother stubble you never saw cut. The great secret in using this machine successfully is to drive it slow and steady all day long."

Manufactured by EMERSON & CO., Rockford, Illinois.

For sale by

S. SANDS MILLS & CO., Agents,

Office of "Maryland Farmer,"

24 South Calvert Street, Baltimore, Md.

Illustration: Circulars sent free when requested.

INTERESTING TO LADIES.

The following extracts are from the testimony, taken under oath, in a recent case pending before the United States Patent Office, upon the actual merits of the

GROVER & BAKER SEWING MACHINE,

and its relative merits as compared with other machines:

Mrs. Dr. McCready, says:

"I have used, for nine years, a GROVER & BAKER MACHINE, and upon it I have done all kinds of family sewing for the house, for my children and husband, besides a great deal of fancy work, as braiding, quilting, and embroidering. During all that time my machine has never needed repair, except when I had the tension altered, and it is as good now as it was the first day I bought it."

"I am acquainted with the work of all the principal machines, including Wheeler & Wilson's, Finkle & Lyon's, Wilcox & Gibb's, Ladd & Webster's, the Florence machines, and Sloat's machines, besides a number of ten-dollar ones; and I prefer the Grover & Baker to them all, because I consider the stitch more elastic. I have worked now in the house that was done nine years ago, which is still good; and I have never found any of my friends who have used the other machines able to say the same thing

Mrs. Dr. Whiting gives the following reasons for the superiority of the Grover & Baker machines over all others:

"The elasticity of the stitch, and ripping when it is required; and also the stitch fastening itself, as you leave off; and also, the machine may be used for embroidering purposes; and therein consists the superiority over other machines.

"The stitch will not break when stretched, as the others do, and neither does it draw the work.

"I find this stitch will wear as long as the garments do—outwear the garments, in fact.

"I can use it from the thickest woolen cloth to Nansook muslin."

Mrs. Alice B. Whipple, wife of Rev. Mr. Whipple, Secretary of the American Missionary Association, testifies:

Q. As the result of your observation and experience, what machine do you think best as a general family instrument?

A. The Grover & Baker, decidedly.

Q. State the reasons, such of them as occur to you, for this opinion.

A. I think the stitch is a stronger stitch than that of any other machine I have used, and it seems to me much more simple in its management than other machines; one great advantage is the ease with which the seam is ripped when necessary to do so; and I think that the work, by an experienced person, on a Grover & Baker machine, is better than the work by such person on any other machine; it requires more skill to work other machines than the Grover & Baker.

Mrs. General Buel says she prefers the Grover & Baker machine over all others.

"On account of its durability of work, elasticity of stitch and strength of stitch. It never rips.

"It is preferred over all others; it is very easy in its movements, and very easily adjusted, and very simple in its construction.

"We can accomplish more in one week, by this sewing machine, than we can in a month by hand-sewing."

Mrs. Dr. Watts, says:

"I have had several years' experience with a Grover & Baker machine, which has given me great satisfaction. Its chief merit is that it makes a strong elastic

stitch; it is very easily kept in order, and worked without much fatigue, which I think is a very great recommendation. I am not very familiar with any other machine, except a Wheeler & Wilson, which I have had. I think the Grover & Baker machine is more easily managed, and less liable to get out of order. I prefer the Grover & Baker, decidedly."

Mrs. A. B. Spooner, says:

"I answer conscientiously, I believe it to be the best, all things considered, of any that I have known.

"In the first place, it is very simple and easily learned; the sewing from the ordinary spool is a great advantage; the stitch is entirely reliable. It does ordinary work beautifully, and the embroidery stitch. It is not liable to get out of order. It operates very easily. I suppose I can sum it all up by saying it is a perfect machine.

"I have had occasion to compare the work with that of other machines. The result was always favorable to the Grover & Baker machine."

Mrs. Dr. Andrews, testifies:

"I prefer it to all other machines I have known anything about, for the ease and simplicity with which it operates and is managed; for the perfect elasticity of the stitch; the ease with which the work can be ripped, if desired, and still retain its strength when the thread is cut, or accidentally broken; its adaptation to different kinds of work, from fine to coarse, without change of needle or tension."

Mrs. Maria J. Keane, of the house of Natalie, Tilman & Co., says:

"Our customers all prefer the Grover & Baker machine, for durability and beauty of stitch."

Mrs. Jennie C. Croly, ("Jenny June,") says:

"I prefer it to any machine. I like the Grover & Baker machine in the first place, because if I had any other I should still want a Grover & Baker; and, having a Grover & Baker, it answers the purpose of all the rest. It does a greater variety of work, and it is easier to learn than any other. I like the stitch because of its beauty and strength and because, although it can be taken out, it don't rip, not, even by cutting every other stitch."

The foregoing testimony establishes beyond question:

1. The great simplicity and ease of management of the Grover & Baker machines.
2. That they are not liable to get out of repair.
3. That a greater variety of work can be done with them than with other machines.
4. That the elasticity of the stitch causes the work to last longer, look neater, and wear better, than work done on other machines.
5. That the facility with which any part of the seam can be removed when desired is a great advantage.
6. That the seam will retain its strength even when cut or broken at intervals.
7. That, besides doing all varieties of work done by other sewing machines, these machines execute beautiful embroidery.

Over one hundred other witnesses in the case above referred to testified to the superiority of the Grover & Baker machines in the points named in substantially the same language, and thousands of letters have been received from parts of the world, stating all the same facts.

Send for a Circular.

OFFICE AND SALES ROOMS,

181 Baltimore Street,

BALTIMORE.

IMPORTANT TO FARMERS !

SUPER PHOSPHATES.

THE MARYLAND FERTILIZING AND MANUFACTURING CO.

Incorporated January, 1867.

DIRECTORS.

WM. G. HARRISON,
LAWRENCE SANGSTON,
ROBERT TURNER,

WILLIAM NUMSEN,
RICHARD J. BAKER,
WILLIAM TREGO.

WILLIAM TREGO,
Manufacturing Chemist,

LAWRENCE SANGSTON,
President.

This Company, incorporated by the Legislature of Maryland for the Manufacture and Sale of Fertilizers, are now prepared to furnish the Agricultural community with their products.

Deriving their supply of material from the richest of the recently discovered deposits of Bone Phosphates in South Carolina, they have established, and will inflexibly maintain, a higher standard of Fertilizing value than any similar production hitherto on the market.

While the material they use contains 60 per cent. of Bone Phosphate of Lime, it is guaranteed to contain a larger per centage of SOLUBLE PHOSPHATE than any heretofore used.

FINE GROUND BONE PHOSPHATES,

Price \$30 Per Ton, in Bags.

Containing, by the average of the Analyses of Professors Piggott, Leibig and Popplein, 60.20 per cent. of Bone Phosphate of Lime.

The unusual per centage of *Soluble* Phosphate will make this form very desirable to Farmers who prefer to use it in its natural state, or to manipulate for themselves.

ALKALINE SUPER PHOSPHATE, price \$50 per ton, in Bags.

This preparation has special reference to the growth and development of the Seed or Grain, and is intended for soils that produce large crops of Straw, and small crops of Grain.

AMMONIATED SUPER PHOSPHATE, PRICE \$55 PER TON, IN BAGS.

Adapted to lands that require a full development of the crop, both Straw and Grain.

TOBACCO FOOD, price \$60 per ton, in Bags.

A speciality for the Tobacco Plant, rich in Ammonia, Potash and Nitrates, but adapted to all Plants that require a prompt and vigorous growth.

The Superiority of the South Carolina Phosphate is fully demonstrated by the fact that most of the leading manufacturers of Artificial Fertilizers are now using, or making arrangements to use it, as the Phosphatic base of their preparations, and large quantities are being shipped to Europe.

The various preparations of the Maryland Fertilizing and Manufacturing Company are made under the personal supervision of a Manufacturing Chemist of thirty years' experience, and are confidently recommended to the Agricultural community.

LAWRENCE SANGSTON, President,

WHEEL RAKES.



Having thoroughly examined the market, and spared no pains in trying to find the best, we are prepared to offer to our customers great inducements in WHEEL RAKES. To agents who have sold RAKES for us heretofore, we would say that we can supply them with *a better article, and at a less price, than we have ever done before.*

The two kinds which we mention below are both well made and highly finished, and the axles being made of wrought iron, and the teeth of the very best quality steel, they are unusually strong and durable.

THE EAGLE SELF-DISCHARGING RAKE

Can be worked by hand or as a self-discharger, as the driver may wish. In either case it can be worked by a small boy, being perfectly simple and easily managed.


PRICE \$42.

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THE EXCELSIOR WHEEL RAKE

Is a strong, simple and durable article and cannot fail to give satisfaction. It has both a foot treadle and a hand lever, and is very easily discharged. It possesses more good points than any Rake (not a self-discharger) that we have ever seen.

PRICE \$40.

 Neither of the above RAKES have their superior.

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may-tf

22 and 24 S. CALVERT STREET, Baltimore, Md.

SEEDS! SEEDS!! SEEDS!!!

E. WHITMAN & SONS

Are now receiving by each of the regular steamers of the Baltimore and Liverpool line
their stock of

FIELD AND GARDEN SEEDS,

Grown for them in England and on the Continent of Europe,

Which, together with their AMERICAN GROWTH OF FIELD AND GARDEN SEEDS, will make the largest and best assortment ever offered in this market, and will enable them to compete with any house in this country.

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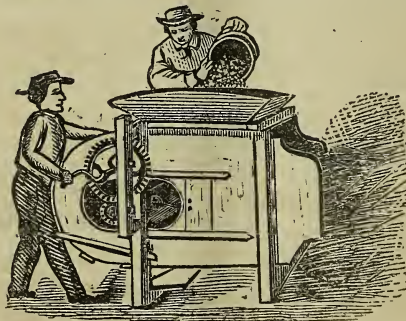
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MONTGOMERY'S ROCKAWAY & LOCOMOTIVE WHEAT FANS.

Patented December 29th, 1868.

Awarded 127 Premiums.



10 Silver Medals.

We are the sole manufacturers of these justly celebrated FANS, which has proved themselves by many trials to be superior to any others yet invented.

They have in late contests obtained premiums over several Fans claiming to be improvements over the Locomotive and Rockaway, and now stands unequalled by any other Fans in the country.

We have a splendid stock of these Fans now ready for the market, with all the latest improvements. Those wanting the Side Shake will order the Rockaway, and those wanting the Back and Forward motion will order the Locomotive Fan. All these Fans are put up under the supervision of the inventor,

EXCELSIOR WHEAT FAN.

We have sold a great many of these Fans during the last two seasons and can recommend them as being a good article. Having bought out the manufacturer's entire stock, consisting of over five hundred Fans, at an exceedingly low price, we can offer them at a much less figure than at which they could otherwise be sold. Price \$30.

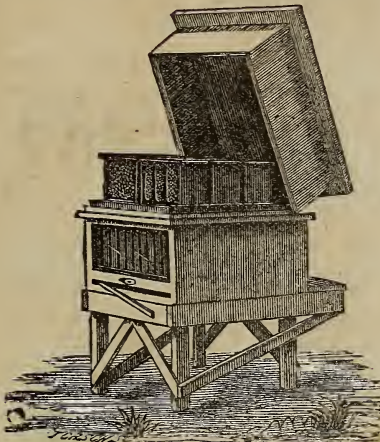
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22 and 24 South Calvert street, Baltimore, Md.

LANGSTROTH'S

PATENT

Movable Comb Bee Hive.



Patent Extended for 7 years from Oct. 1856.

Territorial rights, and bives of the above patent, with comb guides of his own patent, and surplus honey arrangements, may be had on application to the undersigner, owner of the Langstroth patent, for the States of Maryland, Delaware and part of Ohio.

RICHARD COLVIN,

may-6t No. 77 E. Baltimore St. Balt.

N. B.—The public are cautioned against purchasing or using HIVES containing Moveable Comb Frames, which infringe in whole or in part the rights secured in the above patent.

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A Self-Acting Household Wonder,

FOR

Washing & Cleansing Clothes,

And all articles of the coarsest or most delicate texture, without the least injury.

NO LABOR! NO WEAR!! NO TEAR!!!

The Fountain Clothes Washer.

This simple invention renders the hitherto most unpleasant of all days, viz., the washing day, comparatively easy and agreeable.

“EUREKA”

Self-Adjusting Clothes Wringer,

*The only reliable Wringing Machine in the world.
Steel Elliptic Springs.*

They say 'tis small and simple,
Yet it does the million please—
The Eureka (“I have found it,”)
Can be worked with speed and ease.

The Eureka is not only a great labor saver, but also saves very much in the wear and tear of garments, clothes lasting as long again as when wrung without this machine, thereby paying for itself in every year's use.

COLLINS & HEATH,

Stove, Furnace and Plumbing House,

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MANUFACTURER OF

TUBULAR DRAINS,

IN GLAZED STONEWARE.

ALSO,

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“FLOUR OF BONE.”

We will give a money guarantee of the purity of this article. It is pure *unsteamed, unburnt bone*, reduced to the *fineness of flour*, which adds 100 per cent. to its value. It is as *quick and active*, as acid *dissolved bone*, hence its value is vastly greater, because it contains neither acid nor water, which necessarily add weight, and reduce the quantity of valuable elements. We recommend 250 pounds to be used in place of 300 pounds Super Phosphate or dissolved bone.

JOHN S. REESE & CO.,

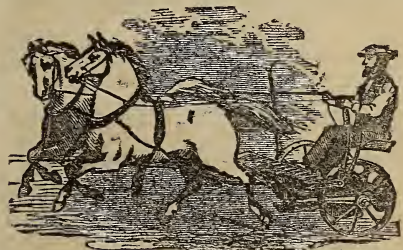
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71 South Street, Baltimore.

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Awarded First Premiums at the most extensive Field Trials ever held in any country. Manufactured by the Incorporated Company of

C. AULTMAN & CO.

Canton, Ohio.

For circulars, &c., apply to

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GOLD



MEDAL



FAMILY SEWING MACHINE.

The most Simple, Durable, Cheapest, Economical and Popular !

Its sales are 100,000 more than the next largest Company, whose Machine is fully three years older.—
Sales as per sworn reports up to September 10th, 1867.

WHEELER & WILSON.....	300,000	SINGER.....	202,000
GROVER & BAKER.....	165,000	FLORENCE.....	35,000

Awarded the Highest Premium at the Paris Exposition, all the machines of the world in competition.

Every one may be the possessor of one of these unrivalled Machines, as we endeavor to make the terms of sale suit all customers. *See* Call at our Salerooms, or enquire of our Agents, and look at the Machines, and be sure and ask the terms of sale.

PETERSON & CARPENTER, General Agents,

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MOWERS & REAPERS**

Used in all Countries, and universally commended as **THE BEST IN USE !**



Awarded **MORE FIRST PREMIUMS** than any other Machine manufactured, both in this and Foreign Countries, among which is **THE HIGHEST PRIZE—Two Grand Gold Medals and Cross of the Legion of Honor—AT PARIS EXPOSITION, 1867.**

More than 120,000 now in use. 20,000 manufactured and sold in 1868, and the demand unsupplied.

INCREASING DEMAND !

INCREASED FACILITIES !

ADDITIONAL IMPROVEMENTS for 1869 !

Wood's Prize Mowers, (one and two horse) ; Wood's Self-Raking Reaper with Wood's New Mowing Attachment ; Wood's Hand Rake Reaper, and Haines' Illinois Harvester. Manufactured by the Walter A. Wood Mowing and Reaping Machine Company. General Office and Manufactory **HOOSICK FALLS, RENSSELAER CO., N. Y.**

BRANCH OFFICE AND SALESROOM { **44 Courtland Street, N. Y. City, P. O. Box 5805.**
Alexandria, Va.

Send for New Descriptive Circular and Price List. Applications from the South, south of Virginia, should be addressed to the New York Branch Office, as above.
Reliable agents wanted. Extra inducements offered !

mar-4t

NAVASSA GUANO,

The only reliable source of Rich Bone Phosphate of Lime.

The attention of manufacturers of Artificial Manures and agriculturists is called to the following analysis of Navassa Guano. The fact alone of a good and increasing market having been found in Europe for this guano, whilst none of the many Phosphates for sale in this country can there find a purchaser, speaks as favorably for the richness and reliability of our guano as it is possible, and the further fact that it is the base of nearly all the well known Artificial Manures now manufactured, and the recommendation of it by such men as Prof. Voelcker, Sibson and Liebig, is sufficient guarantee to the user that by its selection he has obtained the richest Phosphatic Material extant. We guarantee the guano to contain a given amount of Bone Phosphate of Lime, to be analyzed upon arrival by any competent chemist the purchaser may select. Supplying the trade with this Guano in fine powder, packed in strong bags, containing twenty per cent. more Phosphate than any article now offered, at \$30 per ton, or crude, direct from Navassa Island, at proportionally low rates.

LABORATORY, 11 SALISBURY SQUARE, FLEET STREET.

Analysis of six samples, representing that number of cargoes, lately brought to England.

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Moisture.....	13.61	2.73	5.51	7.70	8.77	13.07
Water in combination and Organic Matter.....	6.72	7.39	6.50	7.04	6.67
*Phosphoric Acid.....	30.88	32.48	31.85	31.98	31.23	31.64
Lime.....	32.56	34.06	37.73	35.10	37.22	37.08
Oxides of Iron, Alumina, Carbonic Acid, &c.....	13.88	20.16	16.09	15.60	13.80	16.01
Insoluble Silicious Matter.....	2.35	3.18	2.32	2.58	2.31	2.22

*Equal to Tribasic Phosphate of Lime (bone earth).. 67.41 70.90 69.50 69.81 68.18 69.07

The commercial value of Navassa Guano, it is scarcely necessary for me to say, is mainly regulated by the amount of Phosphoric Acid which it contains. In the foregoing analysis the percentage of Phosphoric Acid was accurately determined.

AUGUSTUS VOELCKER,

Prof. of Chemistry to the Royal Agricultural Society of England.

Remarks and Analysis by Dr. Sibson, of London.

11 Eaton Terrace, St. John's Wood, Dec., 1867

Amongst the natural deposits of phosphates now at command for furnishing the constituents of our super-phosphates and other prepared manures at present so extensively consumed in our fields, that of the Island of Navassa, lately brought to notice, appears to be one of the most important. In the search for Natural Phosphates, now pretty actively prosecuted, materials of this description are sometimes found, which may possess a certain amount of scientific interest, but are of no practical importance, solely on account of their insignificant quantity. Again, a phosphate possessing almost every desirable quality, may be excluded from the market by the unfortunate fact of its percentage of Phosphate of Lime being too low. Neither of these drawbacks, however, attach to the Navassa Guano.

As I find from analyses of several cargoes lately brought to this country, that the Navassa Guano possesses a high value, I consider that it merits more than ordinary attention.

	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.
Moisture and Water of Combination.....	10.24	9.25	5.73	12.90	11.15	6.53
*Phosphoric Acid.....	32.94	32.57	33.43	31.21	31.27	33.03
Lime.....	37.91	37.34	40.15	35.13	34.90	37.20
Carbonic Acid.....	1.30	1.20	(not determined.)		1.68	1.02
Equal to Carbonate of Lime.....	2.95	2.72	"	3.75	2.33	
Oxide of Iron, &c.....	15.35	17.18	17.85	16.63	15.83	18.24
Insoluble Matter.....	2.25	2.46	2.84	2.13	5.17	3.98

*Equal to Tribasic Phosphate of Lime..... 71.36 70.57 72.43 69.80 67.76 71.58

The average percentage of Phosphate of Lime, in most samples, I find to be over 70 per cent., which as an average, is higher than most Phosphatic materials now on the market.

ALFRED SIBSON, F. C. S., &c. *Royal Agricultural College, Cirencester, England.*

Analysis by Dr. Liebig, Baltimore, of cargoes lately imported.

Bark Savannah.....	June 8, 1868,	containing, crude, 69.94—when dried, 76.61 per cent of Bone Phosphate of Lime.
Brig Cyrus Fassett, " "	" 27, 1868,	" 68.89 " " 75.16
Brig Videlia, " "	" 10, 1868,	" 68.87 " " 75.44
Brig M. E. Banks, May 8, 1869,	" "	" 66.03 " " 73.59
Brig Romance.....	June 16, 1868,	" 69.11 " " 76.61
Brig E. H. Rich, Sept. 21, 1868,	" "	" 68.57 " " 74.56
Brig Dirego.....	Aug. 12, 1868,	" 67.00 " " 75.16

For Sale by Navassa Phosphate Co.

R. W. L. RASIN, General Agent,

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GRAPE VINES & GRAPE WOOD,
GROWN AT
AZADIA VINEYARD,
NEAR WASHINGTON, D. C.

A large stock of splendid one and two year old
GRAPE VINES of the following varieties: Adiron-
dac, Delaware, Concord, Iona, Rogers' Hybrids,
Salem, &c. These vines are layers, and one and two
eye cuttings, grown in the open air.

These vines and grape wood will be sold very low.
For further particulars apply to

Dr. JOHN B. KEASBEY,
may-1y 312 F Street, Washington, D. C.

GEO. W. McLEAN,
COMMISSION MERCHANT,
And dealer in
Agricultural Implements, Produce,
FERTILIZERS, &c.

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Wm. H. McLean, Esq. " "
Saml. L. Worthington, Esq., Cockeysville, Md.
Thos. L. Worthington, Esq. " " oct-ly

Vol. XIV. THE HOMESTEAD 1869.

AND

WESTERN FARM JOURNAL,

AN OFFICIAL STATE PAPER, published at the CAPITOL OF
IOWA, weekly, contains full list of names, with the P. O.
address, of officers of State and County Agricultural and
Horticultural Societies in Iowa.

Is the only leading agricultural paper north of St. Louis,
and west of the Mississippi river, and to persons who think
of

REMOVING TO THE WEST,

or to breeders of farm stock, and dealers in implements,
etc, it will be of great value. To accommodate those who
wish to remove to the west, we will send it the short term.
Terms: One year, \$3; Six months, \$1; Three months
60 cents.

This Journal being, though legislative enactment, taken
by all the Counties in Iowa, and kept on file by every
County Clerk in the State, it will readily be seen that it is
unequaled as an advertising medium West of the Missis-
sippi river. Address

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Improved Breeds of Live Stock.

The undersigned, editor of the *Practical Farmer*, having
been for many years engaged in breeding, importing and
shipping LIVE STOCK to all sections of the United States,
is now prepared to execute orders for his PURE WHITE
CHESTER HOGS, of which he has shipped large num-
bers. Also, pure ESSEX and BERKSHIRE HOGS, AL-
DERNEY, AYRSHIRE, DEVON and SHORT HORN
CATTLE. SOUTHDOWN, MERINO and COTSWOLD
SHEEP. All the improved breeds of POULTRY—Chick-
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ed. Price lists furnished on application, and all communi-
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For tempered clay—common labor only required—
worked by one man—makes 500 an hour, \$110—
by a horse, 800 an hour, \$300—1,200 an hour,
\$400—by steam, 2,000 an hour, \$500—
3,000 an hour, \$700.

DRYING TUNNEL

For drying in twenty-four hours Bricks, Fruit,
Vegetables, Broom Corn, Hops, Lumber, Pea-nuts.
Bricks moulded one day go into the kiln the next
all the year.

HOT BLAST KILN, by which one-half the fuel
is saved—220,000 bricks have been burned
with 53 cords.

REVOLVING SEPARATOR, which pulverizes
the clay, and frees it from stone. A piece of lime-
stone, the size of an acorn, will burst a brick.

For further particulars, in a pamphlet (eighth
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setting and burning, with wood or coal, address,
sending 25 cents,

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Manufacturer of



Saddles, Harness & Collars

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Picture Frames,

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Fine English, French and German ENGRAVINGS—a
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PLATED ALBATA Forks, Spoons, Ladles, Castors, Tea
Sets, Liquor Stands, Urns, &c. Ivory and Bone Handle
Table and Desert Knives & Forks, Carvers, Steels,
Butcher and Bread Knives, &c.

Planned, Japan and common TIN WARE, in all its
varieties.

Wooden Ware, fine and common Hardware, Baskets,
Willow Ware, Door Mats, &c.

Sweep, Hand and Dust Brushes; Feather Dusters of all
descriptions.

Waiters and Tea Trays, all sizes and varieties.
Devonshire Portable Carpet and Sewing Chairs, Table
Mats, Napkins, Rings, Knife Boxes, &c.

Cedar Chests of all sizes.
Refrigerators of the Dr. Kane and Waterman's Pat-
tent

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TOBACCO PLANTERS, FARMERS,
AND
VEGETABLE RAISERS!

WILSON'S
AMMONIATED SUPERPHOSPHATE OF LIME
AND
WILSON'S TOBACCO GROWER.

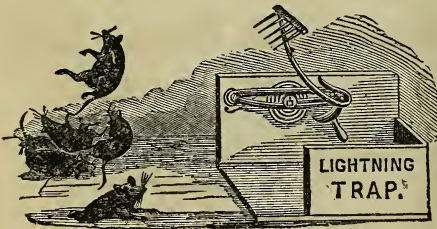
The Cheapest and Best Fertilizer in the Country.

It has raised good crops of Wheat, Corn, Oats, Potatoes, Grass, Tobacco and Vegetables of all kinds. We have certificates which we can show and refer to those who have used it, but the best certificate of any fertilizer is the experience and trial of the farmer, its effects upon the crops, and the soil observed, as he and neighbors use it year after year; any fertilizer that will continue to stand this test may be safely pronounced to be good. We believe this has genuine merit in it. We think it will stand the above test—the only one that is of any value—and we are willing to abide the result. Give it a trial.

DUVALL & IGLEHART,
SOLE AGENTS,

128 Light St. Wharf, cor. Conway,
Baltimore, Md.

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Agents Wanted Immediately,

To sell the **LIGHTNING TRAP**, a new and wonderful invention. It is first wound up like a clock; then it kills Rats, Gophers, Squirrels, Mice, &c., throws them away, and sets itself as quick as its name indicates. One trap and terms to agents will be sent by express on receipt of one dollar.

Address **LIGHTNING TRAP CO.**
Jan-6t 95 Mercer Street, N. Y.

PURE BONE DUST.

PRICE \$45 PER TON.

Just received by

E. WHITMAN & SONS,
mar-1f 22 and 24 S. Calvert st., Baltimore.

Watches, Jewelry, &c.

LARMOUR & CO.

No. 10 LIGHT STREET,

OPPOSITE THE FOUNTAIN HOTEL,

BALTIMORE, MD.

Have this day opened their new stock, comprising
CHRONOMETER WATCHES,
TIMING WATCHES,

ENGLISH WATCHES,

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We also offer

WM. B. LARMOUR'S NEW COMBINATION WATCH,
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Warranted Free from Adulteration.

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This Bone Dust is not so fine as our Bone Flour, but sufficiently fine to prove active on the first crop. It is prepared in New Orleans for our sales.

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A Standard Manure for all Field and Garden Crops. It matures the Crop much earlier, and greatly increases the yield.

Lands exhausted by long cultivation are made productive by the use of this Super-Phosphate. It supplies to the soil those substances that are taken out by cropping. It is in fact PLANT FOOD, and when it is used, the land continues to improve each year, and to require a less quantity to produce the same amount of results.

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It improves the quality of the fruit of GRAPE VINES and FRUIT TREES; also of STRAWBERRIES and other small fruits.

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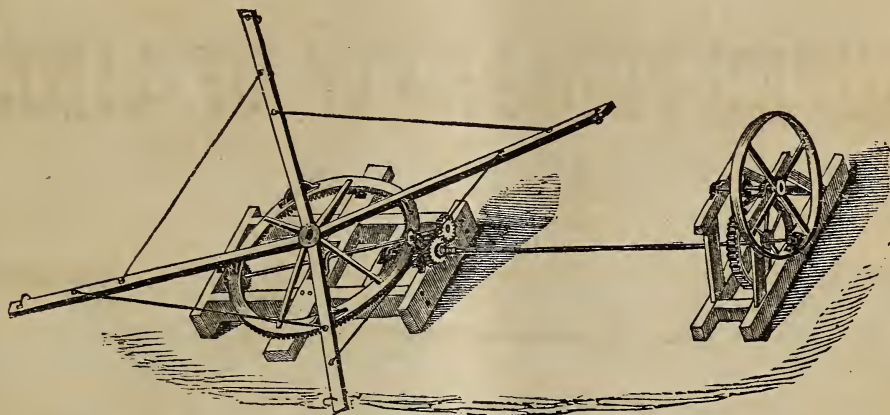
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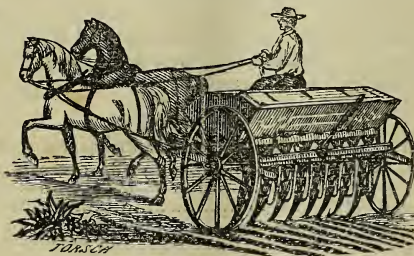
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For Separating, Cleaning and Bagging Grain, at one operation.

This machine has been in use for about 10 years some of them having threshed more than a hundred thousand bushels grain, and owing to its strength, simplicity and completeness of its operations, is *universally acknowledged to be the Best in Use*. It is the only machine that bags the grain clean enough for market. Being provided with a self-regulating blast and other improvements for saving all the grain, it will pay for itself, over any other Separator, in a few years.

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I am manufacturing the celebrated PELTON TRIPLE GEARED HORSE POWER of all sizes, 3 to 10 horse. The Castings are made in my own Foundry, of the very best Iron, and I will warrant this Power to run easier and bear double the strain of any other in use.

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Having an Improved Blanchard Lathe and other machinery for manufacturing Plow Handles on a large scale I can supply the trade with all varieties of No. 1 Plow Handles at the shortest notice.

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The Great Remedies for all Diseases of the Liver, Stomach or Digestive Organs.

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Hoofland's German Remedies are counterfeited. See that the signature of C. M. JACKSON is on the wrapper of each bottle. All others are counterfeit.

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Do not forget to examine well the article you buy, in order to get the genuine.

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